THE EFFECT OF INTERPERSONAL TOUCH DURING SERVICE RECOVERY

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Key words

consumer involvement, employee gender, experimental design, failure severity, frontline employee, interpersonal touch, mood states, perceived employee responsibility, perceived interactional justice, recovery satisfaction, revisit intention, service recovery, word of mouth

Abstract

Interpersonal touch is frequently promoted for its positive outcomes on business communication. Frontline employees touch consumers primarily to foster a better consumer-employee relationship, leading to increased shopping time and higher revenue. During a service failure, frontline employees are expected to solve the consumer's problem promptly and to ensure consumer satisfaction. This thesis examines how consumers respond to an employee touching them (e.g., a pat on the shoulder) when engaged in service recovery. Using three experiments, this thesis addresses the following research gaps: (a) the absence of literature on the effects of interpersonal touch during service recovery; (b) understanding the joint effect of interpersonal touch and perceived employee responsibility during service recovery; and (c) the absence of empirical analysis of interpersonal touch mediators regarding interpersonal touch during service recovery.

This research gaps were addressed with the results from three experiments. Results from Study 1 demonstrate that interpersonal touch has a negative effect on revisit intention, especially when the touch is from a male employee. Moreover, if the touch is from a frontline employee who is perceived to be responsible for the mistake, this also has a negative effect on revisit intention. Study 1 also found that neither gender likes to be touched by a male employee. The role of consumer mood states and perceived interactional justice were also examined. Study 2 further examines these results in the context of a pat on the shoulder, revealing marginal negative effects on revisit intention. Finally, Study 3A and 3B tests failure severity during service recovery, identifying that failure severity jointly influences interpersonal touch on revisit intention, recovery satisfaction, and word of mouth.

These findings contribute new knowledge regarding how interpersonal touch influences consumer responses to service recovery. In addition, failure severity alone negatively affects recovery satisfaction and reduces positive word of mouth.

Furthermore, perceived interactional justice act as mediators of the effect of interpersonal touch and revisit intention and recovery satisfaction; mood states act as mediators of the effect of interpersonal touch and revisit intention, recovery satisfaction and word of mouth.

In terms of practical implications, these results may assist marketers to develop service recovery strategies based on a better understanding of consumer responses to touch. Limitations of the research and future research direction are also discussed.

Table of Contents

Key	words	1
Abst	ract	ii
Tabl	e of Contents	iv
List	of Figures	ix
List	of Tables	xi
List	of Key Variables	.xiii
State	ement of Original Authorship	. xiv
Ackı	nowledgements	xv
Cha	pter 1: Introduction	1
1.1	Research Problem	1
1.2	Research Rationale	4
1.3	Research Objectives	8
1.4	Research Approach	9
1.5	Contributions to Theory and Practice	11
1.6	Structure of Thesis	15
1.7	Conclusion	16
Cha	pter 2: Literature Review	17
2.1	Introduction	17
2.2	Interpersonal Touch	
2.3	Overview of Service Recovery Context	28 31
2.4	Touch aS AN individual preference	35
2.5	SUGGESTED Mediators 2.5.1 Perceived Interactional Justice 2.5.2 Mood States 2.5.3 Consumer Involvement	38 40
2.6	Research rationale and research questions	44
2.7	Conclusion	48
	pter 3: Study One – The Effect of Interpersonal Touch by Frontline	49

3.1	Introduction	49
3.2	Hypotheses development	50
3.3	Method Design and Justification	56
	3.3.1 Research Justification	56
	3.3.2 Experimental Manipulation and Scenario Development	59
	3.3.3 Sample	
	3.3.4 Instrument Development and Measure	
	3.3.4.1 Measurement Scale for Realism Check	
	3.3.4.2 Measurement Scale for Manipulation Check	
	3.3.4.3 Measurement Scale for Confounding Check	
	3.3.4.4 Measurement Scale for Revisit Intention	
	3.3.4.6 Measurement Scale for Mood States	
	3.3.4.7 Measurement Scale for Comfort Level with Interpersonal Touch	
	3.3.5 Ethical Clearance	
	3.3.6 Data Collection Procedures	
2.4	Data Analysis	
3.4	3.4.1 Preliminary Data Preparation and Analysis	
	3.4.1.1 Data Preparation	
	3.4.2 Reliability Test and Internal Consistency	
	3.4.3 Manipulation Check	
	3.4.4 Realism Check	
	3.4.5 Confounding Check	
	3.4.6 Correlations Test	
	3.4.7 General Linear Model Test - Univariate	
	3.4.8 Hypotheses Test	
	3.4.8.1 Investigating the Effects of Interpersonal Touch	
	3.4.8.2 Investigating the Effects of Employee Gender	
	3.4.8.3 Investigating the Effects of Employee Responsibility	
	3.4.8.4 Investigating the Mediating Effects of Perceived Interactional Justice	
	3.4.8.5 Investigating the Mediating Effects of Mood States	00
3.5	Discussion	
	3.5.1 The Effects of Interpersonal Touch	
	3.5.2 The Effects of Perceived Employee Responsibility	
	3.5.4 The Effects of Mood States	
	3.5.5 Testing Comfort with Interpersonal Touch as Covariance	
26	Conclusion	
3.6		
	 Study Two – The Effects of Interpersonal Touch by a Male ntline Employee during Recovery on Recovery Satisfaction and Revisit 	
Inte	ention 97	
4.1	Introduction	97
4.2	Hypothesis Development	98
4.3	Method Design and Justification	103
	4.3.1 Research Justification	103
	4.3.2 Experimental Manipulation and Scenario Development	
	4.3.3 Sample	
	4.3.4 Instrument Development and Measurement	
	4.3.4.1 Measurement Scale for Realism Check	109

	4.3.4.2 Measurement Scale for Manipulation Check	. 109
	4.3.4.3 Measurement Scale for Recovery Satisfaction	109
	4.3.4.4 Measurement Scale for Revisit Intention	110
	4.3.4.5 Measurement Scale for Perceived Interactional Justice	110
	4.3.4.6 Measurement Scale for Consumer Involvement Profile	.111
	4.3.4.7 Measurement Scale for CT	112
	4.3.5 Ethical Clearance	112
	4.3.6 Data Collection Procedure	113
4.4	Data Analysis	113
	4.4.1 Preliminary Data Preparation and Analysis	
	4.4.2 Reliability Test and Internal Consistency	
	4.4.3 Manipulation Check	
	4.4.4 Realism Check	
	4.4.5 Confounding Check	
	4.4.6 Correlations Test	
	4.4.7 General Linear Model Test	118
	4.4.8 Hypotheses Test	119
	4.4.8.1 Investigating the Effect of Interpersonal Touch	
	4.4.8.2 Investigating the Effects of Employee Responsibility	
	4.4.8.3 Investigating the Effects of Perceived Interactional Justice	
	4.4.8.4 Investigating the Effects of Comfort Level with Interpersonal Touch	126
	4.4.8.5 Investigating the Effects of Consumer Involvement	128
	4.4.9 Summary of Hypotheses	
	4.4.10Comparison of Demographic Groups	
	4.4.10.1 Gender	
	4.4.10.2 Ethnic Group	
	4.4.10.3 Experienced a Negative Service Encounter in the Last Three Months	. 132
4.5	Discussion	132
	4.5.1 The Effects of Interpersonal touch	133
	4.5.2 The Effects of CT	
	4.5.3 The Effects of Perceived Employee Responsibility	134
	4.5.4 The Effects of Perceived Interactional Justice	135
	4.5.5 The Effects of Consumer Involvement	135
4.6	Conclusion	136
		150
	pter 5: Study 3 – The Effects of Interpersonal Touch, Perceived	
Emp	ployee Responsibility and Failure Severity during a Service Recovery on	
Rec	overy Satisfaction, Revisit Intention, and Word of Mouth in the Service	
Sect	or 137	
5.1	Introduction	.137
	Hypothesis Development	
5.2	•	
5.3	Method Design and Justification	141
	5.3.1 Research Justification	
	5.3.2 Experimental Manipulation and Scenario Development	
	5.3.3 Sample	
	5.3.4 Instrument Development and Measurement	
	5.3.4.1 Measurement Scale for Manipulation Check	
	5.3.4.2 Measurement Scale for Recovery Satisfaction	
	5.3.4.3 Measurement Scale for Revisit Intention	
	5.3.4.4 Measurement Scale for Word of Mouth	
	5.3.4.5 Measurement Scale for Mood States	
	J.J.4.0 Integrited scale for moon states	. 132

	5.3.4.7 Measurement Scale for Consumer Involvement	
	5.3.4.8 Measurement Scale for CT	153
	5.3.5 Ethical Clearance	154
	5.3.6 Data Collection Procedure	154
5.4	Data Analysis	15/
J. 4	5.4.1 Preliminary Data Preparation and Analysis	
	5.4.1.1 Data Preparation	
	5.4.1.1 Data Freparation 5.4.1.2 Demographics of the Sample 5.4.1.2 Demographics of the Sample 5.4.1.1 Data Freparation 5.4.1.2 Demographics of the Sample 5.4.1.2 Demographics 5.4.1.2 Demographics 6.4.1.2 Dem	
	5.4.1.2 Demographics of the Sample	
	5.4.2 Renability Test and Internal Consistency for Study 5A	
	5.4.4 Realism Check for Study 3A	
	5.4.5 Confounding Test for Study 3A	
	5.4.6 Correlations Test for Study 3A	
	5.4.7 Hypotheses Test for Study 3A	
	5.4.8 Comparing Demographic Groups for Study 3A	
	5.4.8.1 Did Gender Matter?	
	5.4.8.2 Did Age Matter?	
	5.4.8.3 Did Religion Matter?	
	5.4.8.4 Did Recent Experience with a Negative Service Encounter Matter?	
	5.4.9 Reliability Test and Internal Consistency for Study 3B	
	5.4.10Manipulation Checks for Study 3B	
	5.4.11Realism Check for Study 3B	
	5.4.12Confounding Test for Study 3B	
	5.4.13 Correlations Test for Study 3B	
	5.4.14Hypotheses Test for Study 3B	
	5.4.15Comparing Demographic Groups for Study 3B	
	5.4.15.1 Did Gender Matter?	188
	5.4.15.2 Did Age Matter?	189
	5.4.15.3 Did Religion	189
	5.4.15.4 Did Recent Experience with a Negative Service Encounter Matter?	189
	5.4.16Testing CT as a covariate for Study 3B	190
5.5	Discussion	101
3.3		
	5.5.1 Testing the Main Effects	
	5.5.2 Testing the Moderating Effects of Employee Responsibility	
	5.5.3 Mediating Effects	
	5.5.4 The Effects of Covariance	196
5.6	Conclusion	196
Cha	nton (. Discussion and Conclusion	100
Cna	pter 6: Discussion and Conclusion	198
6.1	Overall Research Purpose	198
6.2	Addressing the research questions	200
0.2		
	6.2.1.1 Answer to Research Question 1	
	6.2.1.2 Answer to Research Question 2.	
	6.2.1.3 Answer to Research Question 3	203
6.3	Contribution to Theory	205
	6.3.1 Contribution to the Literature of Interpersonal Touch	
	6.3.2 Contribution to the Literature of Service Recovery	
6 1	·	
6.4	Managerial Implications	
6.5	LimitationS and Future Studies	213
6.6	Conclusion	215
5.0	C011C1G17011	41

References	
Appendices	

List of Figures

Figure 2.1: Outline of Chapter Two	18
Figure 3.1 Outline of Chapter Three	50
Figure 3.2 Conceptual Framework for Study One	55
Figure 3.3 The Effects of Interpersonal Touch on Revisit Intention	83
Figure 3.4 The Moderating Effects of Employee Gender	84
Figure 3.5 Hypothesis 2 - Effect of Employee Gender and Interpersonal Touch and Revisit Intention	84
Figure 3.6 The Moderating Effect of Perceived Employee Responsibility	86
Figure 3.7 The Mediating Effect of Perceived Interactional Justice	87
Figure 3.8 The Mediating Effect of Mood States	88
Figure 4.1: Conceptual framework for Study Two	102
Figure 4.2: The Effect of Interpersonal Touch on Revisit Intention	120
Figure 4.3: Hypothesis 3a – Effects of Perceived Employee Responsibility on Revisit Intention	122
Figure 4.4: Hypothesis 3b – Effects of PER on Recovery Satisfaction	123
Figure 4.5: Hypothesis 4a – The Moderating Effect of PER on Revisit Intention	123
Figure 4.6: Hypothesis 4b – Moderating Effects of PER on Recovery Satisfaction	124
Figure 4.7: Hypothesis 5a – The Effects of Perceived Interactional Justice	124
Figure 4.8: Hypothesis 5b – The Effects of Perceived Interactional Justice	125
Figure 4.9: Hypothesis 7a – The Effects of CT on Revisit Intention	127
Figure 4.10: Hypothesis 7b – The Effects of CT on Recovery Satisfaction	128
Figure 5.1 Conceptual Framework for Study 3	141
Figure 5.2 Effects of Perceived Employee Responsibility on Recovery Satisfaction	165
Figure 5.3: The Moderating Effects of Perceived Employee Responsibility on Recovery Satisfaction	166
Figure 5.4: The Mediating Effects of Perceived Interactional Justice to Perceived Employee Responsibility on Recovery Satisfaction	167
Figure 5.5: The Mediating Effects of Perceived Interactional Justice to Failure Severity on Word of Mouth	167
Figure 5.6: The Mediating Effects of Positive Mood States to Perceived Employee Responsibility on Recovery Satisfaction	168
Figure 5.7: The Mediating Effects of Neutral Mood States to Perceived Employee Responsibility on Recovery Satisfaction	168

Introduction ix

Figure 5.8: The Mediating Effects of Negative Mood States to Perceived Employee Responsibility on Recovery Satisfaction	. 169
Figure 5.9: The Mediating Effects of Neutral Mood States to Failure Severity on Word of Mouth	. 170
Figure 5.10: The Mediating Effects of Consumer Involvement to perceived Employee Responsibility on Recovery Satisfaction	. 171
Figure 5.11: The Mediating Effects of Consumer Involvement to Failure Severity on Revisit Intention	. 171
Figure 5.12: The Mediating Effects of Consumer Involvement to Failure Severity on Word of Mouth	. 172
Figure 5.13 The Effects of Failure Severity on Word of Mouth	. 173
Figure 5.14: The Effects of Interpersonal Touch on Revisit Intention	. 180
Figure 5.15: The Effects of Interpersonal Touch on Word of Mouth	. 181
Figure 5.16: The Moderating Effects of Perceived Employee Responsibility on Revisit Intention	. 182
Figure 5.17: The Moderating Effects of Perceived Employee Responsibility on Word of Mouth	. 183
Figure 5.18: The Mediating Effects of Neutral Mood States to Interpersonal Touch on Revisit Intention	. 184
Figure 5.19: The Mediating Effects of Neutral Mood States to Interpersonal Touch on Word of Mouth	. 185
Figure 5.20: The Mediating Effects of Consumer Involvement to Interpersonal Touch on Word of Mouth	. 186
Figure 5.21: The Mediating Effects of Consumer Involvement to Failure Severity on Recovery Satisfaction	. 186
Figure 5.22: The Mediating Effects of Consumer Involvement to Failure Severity on Revisit Intention	. 187
Figure 5.23: The Mediating Effects of Consumer Involvement to Failure Severity on Word of Mouth	. 187
Figure 5.24: The Effects of Failure Severity on Recovery Satisfaction	. 188
Figure 6.1: Outline of Chapter Six	. 199
Figure 6.2: Mean Scores Comparison	. 211

List of Tables

Table 2.1 Summary of Service Recovery Performance	30
Table 3.1 Factorial design terms and notation for Study 1	56
Table 3.2 Scripting for full experimental video-based scenarios	60
Table 3.3 YouTube video hyperlinks	64
Table 3.4 Summary of Population	65
Table 3.5: Sample demographic characteristic for Study 1	66
Table 3.6 Measurement Scale for Realism Check	68
Table 3.7 Measurement Scale for Manipulation Check	69
Table 3.8 Measurement Scale for Confounding Check	70
Table 3.9 Measurement Scale for Revisit Intention	70
Table 3.10 Measurement Scale for Perceived Interactional Justice	71
Table 3.11 Measurement Scale for Mood States	72
Table 3.12 Measurement Scale for CT	73
Table 3.13 Descriptive Statistics and Reliability Test for Study 1	77
Table 3.14 Manipulation check for Study 1	78
Table 3.15 Realism check I and II for Study 1	79
Table 3.16 Confounding check for Study 1	80
Table 3.17 Correlations test between the variables for Study 1	81
Table 3.18 Main and Interaction Effects on Revisit Intention	82
Table 3.19: Estimates Means, Standard Error and Confident Interval for Interaction between Interpersonal touch and Perceived Employee Responsibility for Male Employee	85
Table 3.20: Estimates Means, Standard Errors, and Confidence Intervals for Perceived Employee Responsibility on revisit intention	86
Table 3.21 Hypotheses Tested in Study 1	89
Table 3.22 Testing CT as Covariance	95
Table 4.1 Factorial Design Terms and Notation for Study 2	103
Table 4.3 Measurement Scale for Recovery Satisfaction	110
Table 4.4 Measurement Scale for Consumer Involvement Profile	111
Table 4.5 Descriptive Statistics and Reliability Test for Study 2	115
Table 4.6 Manipulation Check Test for Study 2	116
Table 4.7 Realism Check I for Study 2	116
Table 4.8 Realism Check II for Study 2	116

Table 4.9 Summary of Confounding Check for Study 2	117
Table 4.10 Correlations Test Summary for Study 2	118
Table 4.11 Test of Between-subjects Effects for Study 2	
Table 4.12: Hypotheses Tested in Study 2	130
Table 5.1 Factorial Design Terms and Notation	142
Table 5.2 Summary of Population for both studies 3A and 3B	149
Table 5.3 Measurement Scale for Recovery Satisfaction	
Table 5.4 Measurement Scale for Perceived Interactional Justice	152
Table 5.5 Measurement Scale for Consumer Involvement	153
Table 5.6 Characteristic of samples for Study 3A and 3B	157
Table 5.7 Descriptive Statistics and Reliability Test for Study 3A	
Table 5.8 Manipulation Checks: Between Subject Effects for Study 3A	160
Table 5.9 Realism Checks for Study 3A	160
Table 5.10 Summary of Confounding Check for Study 3A	161
Table 5.11 Correlation Coefficients between the Variables for Study 3A	162
Table 5.12 MANOVA Test for Study 3A	164
Table 5.13 Hypothesis 4 for Study 3A	165
Table 5.14 Gender Group Differences Summary	174
Table 5.15 Descriptive Statistics and Reliability Test for Study 3B	176
Table 5.16 Manipulation Checks: Between Subject Effects for Study 3B	177
Table 5.17 Realism Checks for Study 3B	178
Table 5.18 Summary of Confounding Check for Study 3B	
Table 5.19 Correlation Coefficients between the Variables for Study 3B	179
Table 5.20 CT Group Differences Summary	191
Table 6.1: List of Research Questions	201
Table 6.2 Overall Effect Directions across all studies for Interpersonal Touch	202
Table 6.3 Overall Effect Directions across all studies for Perceived Employee Responsibility	203
Table 6.4 Overall Effect Directions across all studies for moderating effects	203
Table 6.5 Mediators tested in each study	
Table 6.6 Overall Effect Directions for Perceived Interactional Justice	
Table 6.7 Overall Effect Directions across all studies for Mood States	205
Full Experimental Scenarios for Sty 3A	
Full Experimental Scenarios for Study 3B	

List of Key Variables

Variables	Abbreviation	Descriptions
Interpersonal Touch		An intentional physical touch between two people, by hand (Hall, 1996).
Comfort level with	CT	The individual difference of comfort level of
interpersonal touch		interpersonal touch, which includes initiate touch and receiving touch. (Webb & Peck, 2015)
Perceived employee	PER	Perception of the level of responsibility of a
	1 LK	frontline employee to handle consumers'
responsibility		request and remediation of a problem
		(Guenzi & Georges, 2010).
Employee Gender		Gender of the frontline employee, male or female.
Failure Severity		Level of perceived intensity of a service
Tanuic Severity		failure by the consumer (Weun, Beatty, &
		Jones, 2004)
Perceived	PIJ	Perception of fairness derived from
		interpersonal treatment (Maxham, 2001)
interactional justice		
Mood states		Mild, transient, generalised affective state,
		including positive mood, neutral mood and
		negative mood states
		(Schoefer & Ennew, 2005)
Consumer	CI	Perceived relevance of a service encounter to
Involvement		the consumer (Zaichkowsky, 1994)
Revisit Intention		Behavioural future intention to visit or
		patronise the service provider.
Recovery		Outcome of satisfaction during a service
satisfaction		failure (Oliver, 2010).
Word of Mouth	WOM	Positive referral made immediately after a
		service encounter which provides vital
		information about the service provider to
		consumers, generally helping consumers to
		evaluate and decide on future revisit
		intention (Zeithaml, Berry, & Parasuraman,
		1996).

Introduction xiii

Statement of Original Authorship

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

Signature: QUT Verified Signature

Date: 020 MAY 2020

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Chapter 1: Introduction

Prior research has identified a range of positive and negative responses to interpersonal touch in the context of consumer evaluation, brand evaluation, compliance, and revisit intention (Dolinski, 2010; Hornik, 1992a; Martin, 2012; Webb & Peck, 2015). The majority of prior research on interpersonal touch has found it has positive effects on business interaction. For example, touch increases positive store evaluation, which promotes a longer shopping time (Hornik, 1992a). Unlike previous research on the positive effects of interpersonal touch in positive or neutral contexts (Dolinski, 2010; Levav & Argo, 2010), this thesis examines how consumers respond to interpersonal touch in a negative situation: specifically, service recovery. Service recovery is defined as the process by which a service provider attempts to rectify a service delivery failure (Maxham, 2001). This chapter is organised as follows. Section 1.1 outlines the research problem, and Section 1.2 presents the research rationale. This is followed by the research objectives (Section 1.3), research approach (Section 1.4), and contributions to marketing theory and practice (Section 1.5). An overview of the structure of this thesis is provided in Section 1.6.

1.1 RESEARCH PROBLEM

Interpersonal touch has been emphasized to evoke positive responses such as to foster better commercial relationships (Rosenbaum, Russell-Bennett, & Drennan, 2015), increase compliance (Orth, Bouzdine-Chameeva, & Brand, 2013), persuasion (Peck & Wiggins, 2006), and to increase shopping time (Hornik, 1992a), all of which translates into better revenue. Touch may be a natural part of interaction for some

individuals, while for others, touch also might cause an offensive reaction (P. Andersen & Leibowitz, 1978).

Despite the best efforts of frontline employees, service often fails (Liao, 2007). Service recovery is a second chance for firms to prove themselves to continue to be the preferred service provider (Blodgett, Granbois, & Walters, 1993). Service recovery is expected to rectify and correct mistakes, as it could otherwise intensify consumer dissatisfaction (Bitner, Booms, & Tetreault, 1990). Frontline employees are expected to handle the situation because they are the first point of contact and act as representatives of the firm (Liao, 2007).

Although interpersonal touch is widely used in business gestures, such as a light pat on the shoulder (Levav & Argo, 2010), and a touch on the forearm (Burgoon, 1991), frontline employees may use these gestures blindly without any assessment of their impact. To date, most research has identified links between recovery performance and the factors that may influence recovery satisfaction (Du, Fan, & Feng, 2010); however, none of the model has examined the specific links between interpersonal touch and service recovery and the effect of interpersonal touch during service recovery, and the possible factors that could mediate the outcome such as perceived interactional justice (PIJ) (Maxham, 1998), mood states (Schoefer & Ennew, 2005), and consumer involvement (Laurent & Kapferer, 1985). Therefore, an understanding of the effects of interpersonal touch is crucial to handle service recovery successfully.

1.2 RESEARCH RATIONALE

This research builds on the existing interpersonal touch literature to examine the effects of interpersonal touch during a service recovery on revisit intention and recovery satisfaction. People respond differently to interpersonal touch due to varied

reasons. Positive responses indicate the desire to communicate (Hertenstein, Verkamp, Kerestes, & Holmes, 2006), to affiliate (Spence & Gallace, 2011), to feel secure (Levav & Argo, 2010), to feel more positive (Hornik, 1992a), to cope with stress (Van Horen & Mussweiler, 2014), and to demonstrate social status (Hall, 1996). Nevertheless, people also respond negatively to interpersonal touch, due to factors such as gender differences (Derlega, Lewis, Harrison, Winstead, & Costanza, 1989), religion, self-esteem, and social status (P. Andersen & Leibowitz, 1978).

During service recovery, consumers look to frontline employees to solve the problem. This thesis examines a number of key variables which can influence how consumers respond to interpersonal touch in service recovery: specifically, perceived employee responsibility (PER), perceived interactional justice, mood states, consumer involvement, employee gender and failure severity. In this context, consumers respond differently when frontline employees are perceived to be responsible for the failure and when they are not perceived to be responsible (Guenzi & Georges, 2010). During service recovery, consumers would like to know that they have been treated fairly. Consumer involvement during a service recovery influences future intention (Bambauer-Sachse & Rabeson, 2015; Gohary, Hamzelu, & Alizadeh, 2016). Interactional justice reflects the communication process, which evidently affects consumer behavioural intention during service recovery (Chebat & Slusarczyk, 2005; Kwon, 2010; McColl-Kennedy & Sparks, 2003). Along with interactional justice, research on service recovery has examined its influence on mood states (Schoefer & Ennew, 2005). Physical touch between two people who are not in a close relationship has an effect on mood states, as they may feel offended, embarrassed, or anxious (Martin & Nuttall, 2017; Wilhelm, Kochar, Roth, & Gross, 2001). Gender influences the effect of touch either by a male or female (Hall, 1996),

and failure severity induces an affective response which influences revisit intention, recovery satisfaction, and word of mouth (Smith & Bolton, 2002). The following sections introduce each of the key areas in this thesis.

1.2.1 The Importance of Interpersonal Touch

Prior research has identified a range of positive and negative responses to interpersonal touch in the context of consumer evaluation, brand evaluation, compliance, and revisit intention. However, researchers have also shown that interpersonal touch in professional interactions might make some individuals uncomfortable (Levav & Argo, 2010), as some people are comfortable being touched by strangers, while others are not (Webb & Peck, 2015). As such, it is possible that touch may not always result in a positive effect during service encounters. This is a research gap within the literature regarding interpersonal touch, as the effects of interpersonal touch during service encounters are inconsistent.

The positive effects of interpersonal touch in the literature could make researchers assume that it will be remain positive, even when the recovery is taken place and whether the recovery solution is successful. People touch to gain information in order to support their decision making, and to cope with uncertainty and seek comfort (Van Horen & Mussweiler, 2014). This could lead to the illusion of crowned positive effects of interpersonal touch on service recovery due to the comfort and nurturing elements of interpersonal touch (Hall & Veccia, 1990a). Although it is important, interpersonal touch has not yet been tested in the context of service recovery.

Touch is one of the sensory channels to convey messages that cannot be expressed by verbal communication (Gallace & Spence, 2010). Interpersonal touch distinguishes the degree to which people are affiliated with one another, defining and

clarifying the status of the interpersonal relationship. Touch conveys more composure, immediacy, receptivity, trust, equality, and informality than when it is absent (Burgoon, 1991). In some circumstances, comfort level with touch could be too natural to be noticed.

Individual differences of comfort with interpersonal touch affect the perception of interpersonal touch (Webb & Peck, 2015), such as differences in self-esteem, social status, religion, and gender. According to the literature, people of higher status touch people of lower status to demonstrate a level of dominance (Stier & Hall, 1984). For example, a manager may give a pat on the shoulder to a subordinate, but it is inappropriate for the subordinate to give a pat on the shoulder to a manager in a normal business environment. As gender significantly influences the comfort level of interpersonal touch, this thesis examines gender by way of examining the effect of employee gender (male and female employees) during service recovery on revisit intention. Frontline employees play an important role in service recovery. The next sub-section briefly discusses employee responsibility during service recovery, which is tested as a moderator in this thesis.

1.2.2 Service Recovery and Employee Responsibility

Service recovery is a second chance for firms to prove themselves in order to continue to be the preferred service provider. Although service failure is pervasive, service recovery is expected to be carried out by service providers immediately following the failure to retain consumers, who might eventually switch to competitors (Chang, 2006; Griffin & Lowenstein, 2001). Service recovery is expected to be conducted by frontline employees to recover, rectify and correct mistakes from the service failure, as it can otherwise intensify consumer dissatisfaction (Bitner et al., 1990; Hoffman et al., 2016). This is a well-researched

area, with findings consistently showing that a positive recovery process produces happy consumers, which contributes to positive behavioural intention, such as willingness to pay, consumer satisfaction and revisit intention (Kelley, Hoffman, & Davis, 1993; Liao, 2007).

Satisfaction brings loyalty (Oliver, 1980). Satisfaction during service recovery is significant, which is the antecedent to revisit intention (Tax & Brown, 2012). Both recovery performance and recovery efforts influence satisfaction and revisit intention. Even though frontline employees may not be responsible for negative service encounters, they are often the ones perceived to handle and amend the situation (Chebat & Slusarczyk, 2005; Guenzi & Georges, 2010). Consequently, frontline employees' interpersonal skills to handle service recovery are vital (Guenzi & Georges, 2010; McCollough, 2009; Mostafa, R. Lages, & Sääksjärvi, 2014).

Although interpersonal interactions between frontline employees and consumers are important, and touch may play a role in comforting someone when they are experiencing a negative mood. For instance, a pat on the shoulder (Levav & Argo, 2010) could be used as a common gesture during service recovery. However, this area remains unclear, as no service recovery literature has examined interpersonal touch.

The attributes of frontline employees are also important to service recovery. For instance, employee gender has a documented effect on interpersonal touch during business interactions. In addition, any actions which violate consumers' perceived justice, security, comfort level, or actions that disrupt consumers' self-esteem are perceived as unwilling to assist (Kelley et al., 1993). Research of the effects of perceived justice (Blodgett et al., 1993; Maxham, 1998), mood states (Schoefer & Ennew, 2005), and consumer involvement (Laurent & Kapferer, 1985)

indicate that these factors influence recovery satisfaction and revisit intention. Next, the theoretical background of this research will be discussed.

This research is informed by two key research areas, that is, interpersonal touch and service recovery. In this thesis, these two key research areas are applied to the investigation of the effects of interpersonal touch, situated in the context of service recovery. Interpersonal touch is tested in a consumption setting, where the focus is on the interpersonal physical touch, as interpersonal touch comprises non-verbal communication. This research is conducted in the service recovery context, specifically assessing the situation in which the recovery is carried out by a frontline employee, whereby the frontline employee is perceived to be responsible for the recovery.

The literature regarding frontline employees engaging in service recovery largely focuses on either management or employees, such as examining an employee's emotions (Azab, 2013) or an employee's job satisfaction (Ashill, Rod, & Carruthers, 2008). Surprisingly, the perspective from a consumer lens is rare. This research investigates how consumers perceive the responsibility of frontline employees during service failure and recovery. The perception of frontline employees by consumers is important, as they are the people that the consumer holds responsible when negative encounters occur (Liao, 2007).

In addition to perceived employee responsibility, this thesis also tests perceived interactional justice, mood states and consumer involvement as mediators of the effect of interpersonal touch on the behavioural outcomes, namely revisit intention, recovery satisfaction, and word of mouth. Perceived justice and mood states evidently affect consumer behavioural intention during service recovery (Chebat & Slusarczyk, 2005; Kwon, 2010; McColl-Kennedy & Sparks, 2003). Interactional

justice is the fairness of interpersonal treatment; it reflects the communication process such as courtesy, politeness, and apology (Liao, 2007). Mood states play a major role in consumer evaluation and decision making (Puccinelli, Deshpande, & Isen, 2007; Schwarz, 2013). According to Schoefer and Ennew (2005), positive moods do not have a significant effect on perceived interactional justice in a given negative event; however, negative moods do (Schoefer & Ennew, 2005). This remains an unexplored area regarding how perceived interactional justice and mood states mediate the effect of interpersonal touch during service recovery on revisit intention, notably when a negative experience occurs.

Alongside interactional justice and mood states, consumer involvement during service encounters are examined for their significant effect on service recovery (JungKun Park, Gunn, & Han, 2012). This thesis tests consumer involvement as a mediating factor on the effect of manipulated variables to revisit intention and recovery satisfaction. What is not yet known is whether they are able to mediate the effect of interpersonal touch during service recovery on recovery satisfaction and revisit intention.

1.3 RESEARCH OBJECTIVES

The purpose of this thesis is to investigate the effects of interpersonal touch during service recovery on revisit intention. This thesis aims to address the following overarching research question:

How do consumers respond to interpersonal touch during service recovery?

Firstly, research has suggested that intentional interpersonal touch achieves positive effects for behavioural intention, and higher revenue. Although interpersonal touch has a typically comforting role, however, its role during service recovery

following service failure, and in particular how interpersonal touch influences consumers' interaction with a frontline employee has not yet been examined, as the employee might not be the one responsible, but they are the one consumers look for when service fails (Guenzi & Georges, 2010). Service recovery literature confirms that perceived interactional justice (Maxham, 1998), mood states (Schwarz, 2013) and consumer involvement profile (Zaichkowsky, 1994), influence revisit intention and satisfaction in a broad manner. Consequently, this research program seeks to answer the following research questions:

RQ1: To what extent is the effect of interpersonal touch during a service recovery on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth?

RQ2: To what extent is the effect of interpersonal touch on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth affected by perceived employee responsibility?

RQ3: To what extent is the effect of interpersonal touch on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth affected by perceived interactional justice, mood states, and consumer involvement?

1.4 RESEARCH APPROACH

To answer the research questions presented above, a research plan is developed based on three progressive quantitative studies with scenario-based between-subjects experimental design. Role-play scenario analysis has been deemed appropriate for service recovery studies, as field research is less appropriate for complying with ethical demands (Zeithaml, Bitner, & Gremler, 2013). Such experimental design, as

applied in this thesis, typically involves the use of a realistic scenario to make participants understand and imagine themselves in the recovery situation.

Study 1 tests whether interpersonal touch and perceived employee responsibility have a positive effect on revisit intention. This study also tests the mediating effect of perceived interactional justice and mood states. In this study, the effect of a light touch on the forearm is investigated, and the touch is performed by both male and female frontline employees. The service recovery designed for this scenario is for a courier service, which represents recovery at a basic service level. Study 1 identifies a significant interaction between interpersonal touch and perceived employee responsibility, with a mediating effect of perceived interactional justice and negative mood states on revisit intention. Study 1 also finds a significant effect of employee gender, with interpersonal touch from male frontline employees less favourable in this context. In addition, Study 1 also tests the individual comfort level of interpersonal touch (CT) as a covariate, revealing a significant effect. Study 2 is designed to follow up on possible interaction effects, testing whether interpersonal touch, perceived employee responsibility, and CT has an effect on recovery satisfaction and revisit intention. This study tests the mediating effect of perceived interactional justice, mood states and consumer involvement during service recovery, examining male employees only, and further examines CT. It also tests consumer involvement using a consumer involvement profile, adapted from Laurent and Kapferer (1985). This study examines the effect of variables on recovery satisfaction and revisit intention with restaurant meals service. Within this context, consumer involvement is tested during normal service encounters (not service failure and recovery) given that the objective is to provide a positive service delivery,

although mistakes are unavoidable and inherent to the features of service in a restaurant business (Bitner et al., 1990).

In the service recovery literature, satisfaction during recovery is important to the firm (Maxham, 2001). When recovery performance is positive, it normally brings about positive recovery satisfaction and vice versa. Hence, Study 2 and 3 examine recovery satisfaction and revisit intention as dependent variables. Furthermore, Study 3 tests word of mouth as an additional dependent variables.

Study 3 tests whether interpersonal touch, perceived employee responsibility, and failure severity has an effect on recovery satisfaction, revisit intention and word of mouth. This study tests the mediating effect of perceived interactional justice, mood states, and consumer involvement during service recovery. The hypotheses development and individual research designs for each study are more thoroughly detailed in Chapter 3 (Study 1), Chapter 4 (Study 2), and Chapter 5 (Study 3A and 3B).

1.5 CONTRIBUTIONS TO THEORY AND PRACTICE

This research offers empirical studies to answer the research questions and therefore make a range of contributions to both marketing theory and practice.

1.5.1 Theoretical Implications

This research contributes to the continuing literature development regarding service recovery and interpersonal touch in the field of consumer behaviour, more specifically in retail service sectors, where consumers are directly involved and recovery is potentially co-created with the consumers. This research demonstrates how interpersonal touch is accepted during service recovery. Furthermore, this study

aims to shed light on other characteristics that may correlate with interpersonal touch. Therefore, this thesis makes several key contributions to the literature.

First, this is the first study to explore interpersonal touch in the service recovery context, contributing to the evolving literature of interpersonal touch. This study finds that interpersonal touch during service recovery has a negative effect on revisit intention. This contributes to the theory of contamination when closer proximity to contact reduces purchase intention, evaluation, and willingness to pay because it induces feelings of disgust in the consumption context (Argo, Dahl, & Morales, 2006). This contradicts prior research that records both positive and negative effects of interpersonal touch during normal service encounters. However, these findings are in line with Martin (2012) whereby consumers record a negative experience when touched by a stranger. Furthermore, this research confirms that a touch from a male employee is always less favourable than from a female employee.

This study also contributes to the literature regarding individual differences of comfort level with interpersonal touch tendencies and preferences. Prior literature (Webb & Peck, 2015) reveals that an individual's comfort level regarding intentional interpersonal touch varies, but no empirical study has tested how CT affects interpersonal touch during service recovery. This is the first study of CT during service recovery. This thesis identifies that CT is the driving factor for shopper behaviour. Consumers with a higher interpersonal touch comfort level are more positive when they are touched during a service recovery. Specifically, the level of comfort with interpersonal touch is what drives consumers' future intention and satisfaction when they experience touch during service recovery.

Second, this research contributes to the theory of attribution (Folkes, 1984). It is the first study to examine the moderating effect of perceived employee

responsibility to moderate the effect of interpersonal touch during service recovery. Regarding perceived employee responsibility, this research shows that in general, perceived employee responsibility brings a negative effect of interpersonal touch on revisit intention and recovery satisfaction. When a service failure occurs and when service providers are perceived to be able to better control the situation, but fail to do so, consumers do not like to be touched and seek to avoid further affiliation with them (Hall & Veccia, 1990a).

Failure severity also affects consumers' referral, such as word of mouth. Service recovery in a less severe situation results in a higher level of positive word of mouth. This result is in line with prior research of failure severity and future intention, whereby it still stands as important element in service recovery even without the presence of interpersonal touch (Weun et al., 2004).

Third, this research is the first study to test mediators (PIJ, mood states, and consumer involvement) and their mediating effect on the relationship between interpersonal touch and future intention and satisfaction. The tested mediators are found to have a significant effect in the service recovery literature, revealing that PIJ typically has a positive effect on consumers' behavioural outcomes. As predicted, PIJ also influences the effect of interpersonal touch to revisit intention and recovery satisfaction positively. The results reveal that positive mood states positively influence revisit intention, recovery satisfaction, and consumer involvement.

Furthermore, when mood states are not positive, this has a negative effect on word of mouth. This result reaffirms that people would conduct gratification when they are not in positive mood states (Luomala & Laaksonen, 2000) as they would seek gratification to broadcast their dissatisfaction. In regards to consumer involvement,

it mediates the relationship between interpersonal touch and word of mouth positively.

Fourth, this research demonstrates the robustness of the interpersonal touch effect based on three scenario-based experiments. Specifically, it shows how interpersonal touch during service recovery varies with the type of touch (touch on forearm, Study 1; a pat on shoulder, Study 2; fleeting touch on arm, Study 3), and different service contexts with different levels of involvement (courier service, Study 1; full-service restaurant, Study 2; in-flight meal order, Study 3A; and domestic plumbing service, Study 3B).

1.5.2 Practical Implications

This research may assist marketing practitioners, service managers, and entrepreneurs to develop high-level service recovery strategies based on a better understanding of consumer responses to interpersonal touch and perceived employee responsibility, particularly in terms of store revisit intention. This understanding could assist marketing practitioners to maintain positive long-term interpersonal relationships with consumers. This could also assist firms to develop relevant training programmes for employees responsible for service recovery. Interpersonal touch seems to have an overwhelmingly positive effect on behavioural intention and consumer evaluation in the literature. The findings of this thesis may assist firms to establish relevant guidelines when training frontline employees handling service recovery. Specifically, frontline employees may need to be cautious in their use of body gestures during the recovery processes.

Higher consumer involvement results in better revisit intention and recovery satisfaction despite interpersonal touch during a negative experience. Therefore,

service providers could seek to improve consumer involvement. For example, in the restaurant context, higher involvement may take the form of updated menus and weekly specials, a restaurant which is able to keep their interest and enjoyment, and a restaurant which is equally represent the consumer's sign value.

1.6 STRUCTURE OF THESIS

This thesis is presented in seven chapters. The chapters included in this research are described as follows:

- Chapter 1 provides an outline of the research background, objectives,
 research gaps and questions, methodology and design, contribution to
 theory and practice, and the key definitions, limitations, and structure of
 this thesis.
- Chapter 2 presents the literature review. More specifically, this chapter focuses on a detailed discussion of the literature pertinent to the identified research problem, although this is limited to research on interactions of two main streams of literature, namely interpersonal touch and service recovery. Overall, the studies presented in this chapter serve to address the broad research question, to achieve research objectives, and denote the identified gaps, along with links to the studies that address them throughout this present research.
- Chapters 3, 4, and 5 present the methodology and research design and provide an analytical review of the findings from the data collected in Studies 1, 2, and 3, respectively. These chapters discuss and justify the choice of experimental design used to answer the research questions in addition to choices made with regards to the population, sample selection

and size, measures, experiment procedures, manipulation check, ethical considerations, and data analysis method. These chapters also capture preliminary data preparation and demographic analysis, discussion of internal validity tests, and manipulation and confounding checks and hypotheses tests.

• Chapter 6 provides a discussion of the key findings of the overall research investigation by drawing upon the findings from Studies 1, 2, and 3. The theoretical and practical contributions are discussed, in addition to the limitations of this study. Suggestions for future study are also provided.

1.7 CONCLUSION

This chapter has provided an overview of this thesis by outlining the research background and discussing the two key research areas underpinning this thesis. The research problem was discussed, with reference to the research questions identified from the literature. The methodology and research approach to address the research questions were also provided. This chapter also outlined the research contributions and provided an overview of the structure of the thesis. The next chapter provides a comprehensive review of the literature related to interpersonal touch and service recovery. The literature review forms the basis of the research investigation while highlighting the research gaps and explaining the derivation of the research questions.

Chapter 2: Literature Review

2.1 INTRODUCTION

This chapter provides an in-depth understanding of the field of interpersonal touch, situated within the context of service recovery encounters. While the previous chapter presented an overview of this research, this chapter provides a theoretical foundation regarding how, and to what extent, interpersonal touch influences consumers' response to behavioural outcomes such as recovery satisfaction, revisit intention, and word of mouth. This literature review begins with a discussion of interpersonal touch (Section 2.2), followed by service recovery, which is expected after service failure occurs (Section 2.3). It outlines consumers' perception of employee responsibility during service recovery, as frontline employees are expected to be held responsible and carry out the recovery process; and the perceived severity of the failure which likely to moderate the relationship on recovery satisfaction, revisit or re-patronage intention and positive word of mouth after the negative encounter has been rectified and recovered relationship. Subsequently, this thesis discusses interpersonal touch preferences at the individual level (Section 2.4) and potential mediators such as perceived interactional justice, mood states, and consumer involvement that may influence the relationship (Section 2.5). This is followed by the research rationale and research questions to address the research problem (Section 2.6). Lastly, it provides the conclusion (Section 2.7) to the chapter (see Figure 2.1).

Literature Review 17

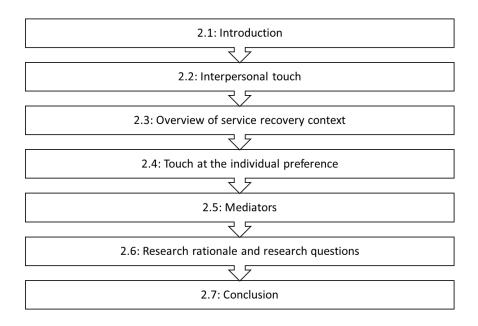


Figure 2.1: Outline of Chapter Two

2.2 INTERPERSONAL TOUCH

Touch, as one form of human communication, is a source of information feedback that can be explained as a demonstration of affiliation (Hall & Veccia, 1990a). Touch is the first sense that develops in human nature from infancy (Hertenstein & Keltner, 2011). It is strongly associated with security and comfort, right from the first second of life. Touch conveys love, hate, and goodwill; lovers touch for arousal; and mothers touch to soothe a crying infant (Jourard, 1966). Touch is the tool of ontogenetic primacy; touch as a form of communication supersedes verbal communication at the beginning of a life, babies learn about space and time through haptic communication before their first words are spoken. Hence, the emerging topic of the function of touch has received increasing attention and focus on its communicative functions (Hertenstein & Keltner, 2011). Touch is one of the sensory channels used to convey messages that cannot be expressed through verbal communication alone (Gallace & Spence, 2010). This section refers to the functions

and motivations of touch and is followed by an examination of circumstances in which people avoid it.

2.2.1 Functions of Interpersonal Touch

Interpersonal touch is common as part of non-verbal communications in service marketing for interpersonal interactions (Bitner, 1992; Haas & Kenning, 2014; Hall, 1996; Orth et al., 2013). According to Hornik (1992a,b) frontline employees touch consumers to increase positive store evaluation, which promotes a longer shopping time. However, not all touches are positive. Anderson et al. (1978) claims that gender differences, religion, and self-esteem mediate the effects of touch, while Stier & Hall (1984) argue that people touch to demonstrate dominance and higher social status. Moreover, unsolicited touch during service encounters decreases the time spent in store, causes negative brand evaluation, reduces willingness to pay, and contributes to less shopping time (Martin, 2012). According to the theory of consumer contamination (Argo et al., 2006), information obtained through physical touch plays a central role in overall product and service evaluation, and physical touch in a retail context induces contamination. This theory is based on the law of contagion (Rozin, Nemeroff, Wane, & Sherrod, 1989). When the frontline employee and consumer come into direct contact, the touch is perceived to be contagious and induces feeling of disgust. This occurs during normal service delivery, and believe it would be also produce negative effects especially when the employee is perceived to be responsible for the negative experience.

Nevertheless, people respond differently to interpersonal touch. Interpersonal touch is affected by different social status, self-esteem, dominance level, gender, and religion. Webb & Peck (2015) claim that there are two types of people: those who comfortable with touching people and being touched by others, and those who are

not comfortable at all. This indicates that acceptance and comfort level is inherent to the individual, and does not stem from situational factors. People touch to gain information to support their decision-making, to cope with uncertainty, and to seek comfort (Van Horen & Mussweiler, 2014). This section discusses the motivations and functions of touch derived from social psychology and marketing literature.

2.2.1.1 Touch to communicate

Touch enables emotional communication, bonding, attachment, intimacy, compliance, pleasure, and liking (Hertenstein et al., 2006). People rely heavily on touch as a nonverbal communication tool compared to verbal communication, for example, to handle stress (Burgoon, 1991; Hertenstein et al., 2006). Touch is also the most intimate form of human communication. For instance, maternal touch develops and maintains a critical component in relationships, and also impacts the attitudes recipients form about the person who provides the touch. Touch plays an ongoing important role in social interactions, the first lesson in loving comes through cuddling as an infant, when touch promotes bonding and therefore foster a longer relationship (Gallace & Spence, 2010). Further, interpersonal touch also communicates emotions such as anger, fear, disgust, love, gratitude and sympathy (Hertenstein, Holmes, McCullough, & Keltner, 2009). Therefore, interpersonal touch as a form of communication can never be replaced (Gallace & Spence, 2010; Spence & Gallace, 2011).

Touch distinguishes the degree to which people are affiliated with one another (Hall, Coats, & LeBeau, 2005). It defines and clarifies the status of the interpersonal relationship. Touch conveys more composure, immediacy, receptivity, trust, equality, and informality than when it is absent (Burgoon, 1991). In contrast, some individuals touch to display their dominance, while low-status individuals prefer to acquire

status through touch, such as handshakes (Stier & Hall, 1984). Historically, because men primarily have higher status than women, men touching women occurs more frequently than vice versa (Hall, 1996; Hall et al., 2005; Henley, 1977). Gender is assessed in this study and is discussed in detail in the next chapter.

2.2.1.2 Touch to gain information

People initiate touch as an exploratory device when they experience informational or personal uncertainty (Van Horen & Mussweiler, 2014). People also touch to collect additional information to assist in making judgements. As life is full of uncertainty, people touch to gain information and fulfil the need to cope with informational uncertainty in order to make good decisions.

People objectively initiate touch to understand the surface of the object or the skin of a person to gain information about the softness, temperature, or texture to make a relevant decision accordingly. People also subjectively initiate touch to cope with feelings and emotions derived from uncertainty, including subjective feelings of cognition, perception, or behaviour; and regardless of uncertainty that occurs at the individual level, such as starting a new job/relationship, and the uncertainty of predicting the future; or at societal levels, such as financial crises or political change. People tend to use touch as a means of coping with their uncertainty intolerance (Van Horen & Mussweiler, 2015). However, other people like to touch without a specific agenda in mind, which will be discussed in the next sub-section.

2.2.1.3 Touch for non-informational functions

When it comes to touching an object, previous research has categorised touch for informational uncertainty as functional or instrumental touch (*utilitarian*), and categorised any other touch as hedonic touch (*autotelic*) (Krishna & Morrin, 2008;

Peck & Childers, 2003). However, autotelic touch differs from instrumental touch, which is used to gain information for further decision making, as it refers to touching the product for non-informational functions. Some people touch for enjoyment, or fun, while other people do not touch for enjoyment, and simply touch products without a purchase intention (Peck & Childers, 2003).

Hedonic touch functions unrelated to product attributes may increase persuasion for high autotelic touch (Peck & Johnson, 2011; Peck & Wiggins, 2006). Touch can affect the perception of certain consumers when they touch the packaging or containers of a product and could influence their willingness to pay for a product. Paradoxically, consumers with a high need for autotelic touch typically have a preference for haptic input that is less affected by non-diagnostic haptic implications compared to consumers with a low need for autotelic touch (Krishna & Morrin, 2008).

2.2.1.4 Touch to feel comfortable and secure

Frontline employees are trained to be closer to consumers to foster a better commercial relationship (Rosenbaum et al., 2015). Therefore it is reasonable to assume that touching a consumer could make a consumer feel more comfortable, foster a better consumer-employee relationship (Guenzi & Georges, 2010), and achieve better store evaluation.

Receiving touch may induce greater security and trust towards the touch initiator. Interestingly, according to Levav and Argo (2010), subtle interpersonal touch promotes a positive relationship with financial risk-taking and positive feelings of security; people who are touched are more likely to take a financial risk than those who are not touched. However, whether a light pat on the shoulder would provide

similar positive feedback with regards to behavioural intentions in the situation in which service has failed and is in the midst of recovery remains unknown. Levav and Argo (2010) examine gender and type of touch, revealing that female-initiated touch has a better effect than male initiated touch, and that a touch on the shoulder by a female toucher provided greater feelings of security and higher financial risk taking possibility.

2.2.1.5 Touch that brings more positive evaluation

Interpersonal touch plays an important role in influencing shopping evaluation (Orth et al., 2013). Hornik (1992a) claims that female shoppers are more likely to be influenced after an employee touches them compared to male shoppers. Hornik (1992a) finds that appropriate touch stimulations by frontline employees lead to positive store evaluation that encourages shoppers and extends their shopping time in a retail store. Aligned with the in-store shopping context, during a dining experience, touch leads to higher evaluation scores of employees and overall evaluation during the consumption activity, as evidenced by a higher rate of tipping (Guéguen & Jacob, 2005; Jacob & Guéguen, 2012). The results also showed a positive relation between touch and consumer's compliance to a marketing request, be it to a tasting request or purchase request, the result again claimed that female shoppers were more highly influenced by touch than male shoppers, and they consumed more (Hornik, 1992b). However, not all individuals enjoy being touched; therefore touch avoidance matters are discussed next.

2.2.2 When Touch could be Avoided

Not everyone likes to initiate touch or to be touched (Kashdan, Doorley, Stiksma, & Hertenstein, 2017). Substantial literature in psychology has shown that people touch to gain information (Van Horen & Mussweiler, 2014), show intimacy

(Hertenstein & Keltner, 2011), demonstrate social status (Hall, 1996), make someone feel comfortable (Guenzi & Georges, 2010), and foster consumer-employee relationships (Guenzi, Johnson, & Castaldo, 2009). People may avoid touch due to religion, self-esteem, gender differences (J. Andersen, Andersen, & Lustig, 1987; P. Andersen & Leibowitz, 1978), and social anxiety (Kashdan et al., 2017).

Researchers have found that not everyone enjoys haptic communications. Men are less willing to perform same gender touch than women (Derlega et al., 1989; Dolinski, 2010; Martin, 2012; Stier & Hall, 1984). Men respond negatively in conditions where a man requests something from another man using touch; indeed, touch negatively affects the chances for request fulfilment. Researchers have identified a range of variables linked to touch avoidance of people who dislike haptic communications (J. Andersen et al., 1987; Larsen & LeRoux, 1984; Orth et al., 2013). For instance, gender issues have been explored in depth. Women are more likely to avoid touch compared to men. Touch avoidance is also influenced by marital status, culture, and personal differences that affect touch avoidance, including communication apprehension, age, and negative self-esteem. Males have a higher level of same-gender touch avoidance that females and marital status has a significant effect on opposite-gender touch avoidance. Anderson and Leibowitz (1978) claim that males' 'proclivity for heterosexual contact' makes males more accepting of opposite-gender touch. The authors also argue that people with communication apprehension or low self-disclosure and self-esteem avoid touch regardless of gender (Anderson & Leibowitz, 1978).

Gender therefore has different effects on interpersonal touch. Males avoid same-gender touch due to homophobia (Dolinski, 2010), while females avoid opposite-gender touch due to the restriction of intimacy expression (Henley, 1977).

Furthermore, women may avoid same-gender touch due to individual social anxiety (Kashdan et al., 2017). However, if opposite-gender touch is not seen in any way as triggering sexual interest, such as a gay frontline employee touching a female consumer, then it is deemed permissible (Rosenbaum et al., 2015). As this relates to opposite-gender touch avoidance, it is worthwhile to assess the effect of employee gender in more depth.

In some service contexts, frontline employees are predominantly either male or female. For instance, carpenters are predominately male and beauticians are predominantly female. Social norms delineate the traditional gender roles of males and females. Men are portrayed as authority figures, and are more assertive and instrumental, while women are seen as more nurturing, accommodating, and yielding (McColl-Kennedy, Daus, & Sparks, 2003). At the point that service is co-produced with the consumers, a good relationship between frontline employees and consumers can increases sales (Rosenbaum et al., 2015). Gender differences can affect the relationship formed during service encounters and recovery, even though gender bias should not be taken into consideration during staff placement. Finsterwalder et al. (2011) find that female frontline employees are expected to do more during service recovery, not only to demonstrate more effort, but also to show appropriate social skills and interaction during the service process, as female employee are expected to be more nurturing in nature. In contrast, male frontline employees are only expected to recover the service with efficient compensation and remedies as they are potrayed as authority figures and are perceived to be more assertive and instrumental (McColl-Kennedy et al., 2003).

During a service recovery, interpersonal touch could be a way to convey the level of sincerity of the apology that cannot be expressed solely through verbal

communication. Touch is an important form of non-verbal communication in typical business gestures. A light fleeting touch on the forearm while apologising could be seen as a common gesture in business communication (Burgoon, Johnson, & Koch, 1998). Prior research shows that touch from a stranger results in negative store evaluations (Martin, 2012). However, touch from a frontline service employee is yet to be tested following a service failure, which is the focus of this thesis. This research also answers the call for future research on how interpersonal touch as an apology gesture affects behavioural outcomes (Martin, 2012). The next section elaborates on the service recovery context.

2.3 OVERVIEW OF SERVICE RECOVERY CONTEXT

The key objective of a service recovery process is to win back consumers who might take their business elsewhere (Griffin & Lowenstein, 2001). As service failures are pervasive during service encounters (Bitner et al., 1990), a service provider cannot prevent occasional problems from occurring. In general, a service failure could reduce store or brand evaluation and consumer satisfaction, which is likely to make consumers switch providers, conduct negative word of mouth, or seek redress (Blodgett et al., 1993; Liao, 2007; Mostafa et al., 2014).

Despite the emergence of self-service technology, many service providers are still heavily people-based and thus involve personal interactivity. For instance, face-to-face interaction between consumers and employees of the service provider is still valid (del Río-Lanza, Vázquez-Casielles, & Díaz-Martín, 2009; Mostafa et al., 2014). Hence, when service fails, prompt recovery actions are expected to be carried out by a frontline employee, most likely through face-to-face interactions between the service provider and consumer. For example, in a retail store context, if a

consumer has a problem using a self-service check-out counter, they would expect a frontline employee to step up to rectify the problem (recovery). Harris et al. (2006) confirm that consumer satisfaction measured during service failure tends to be higher for online or self-service consumers than offline or conventional consumers; this suggests that more effort should be devoted to handling service recovery matters derived from service failure during conventional interactions (Harris, Grewal, Mohr, & Bernhardt, 2006).

In general, overall satisfaction leads to positive revisit intention (Oliver, 1980). Since service is created collaboratively with consumers, this helps to personalise the experience of the service encounter. If it fails, consumers have an expectation in terms of the service failure recovery process and may play a role in the recovery experience (Roggeveen, Tsiros, & Grewal, 2012). During a service failure, frontline employees are expected to recover the service failure, and if they do not, the failure will be compounded (Kelley et al., 1993) and intensify consumer dissatisfaction (Bitner et al., 1990). Recovery satisfaction has a positive effect on consumers' revisit intention (T. T. Kim, Kim, & Kim, 2009; Tax & Brown, 1998). In summary, research has shown that effective service recovery influences consumer satisfaction, referral (word of mouth), and revisit intention. In general, what makes consumers unhappy and unlikely to revisit the service provider is not the service failure alone, but the manner in which employees of the service providers handle the complaint and attempt to recover the situation (Bitner et al., 1990; Schaefers & Schamari, 2016). Service recovery is an attempt to redeem failed encounters by engaging in corrective actions in order to offset consumers' negative reactions to service failure. The content of employee responses is responsible for whether consumers remember the event either favourably or unfavourably (Zeithaml et al., 2013). Service providers

who provide a choice of remedies to consumers will give consumers a greater sense of control and satisfaction, which are positively associated with loyalty and revisit intention (Jones & Farquhar, 2007; Oliver, 1993, 1999). If service providers cannot provide remedies and handle service failure well, this may lead to consumer dissatisfaction, which is negatively associated with repurchase and revisit intention (Chang, 2006). Service recovery is a moment of truth for service providers, encompassing the need to work harder to redeem the dissatisfied consumers and to strengthen the relationship between service providers and consumers. It also allows service providers an opportunity to prove their commitment to their consumers (Blodgett, Hill, & Tax, 1997; Hart, Heskett, & Sasser Jr, 1989; Mostafa et al., 2014; Smith & Bolton, 2002).

Service recovery is also important because service failure is expensive to service providers. It takes five times more effort to recruit new customers than to retain existing ones (Blodgett et al., 1993; Chang, 2006). On average, dissatisfied consumers tell nine others about their negative experience, and that potential loss of revenue is of double-digit magnitude. However, if service providers are able to recover the situation, this leads to the re-establishment of satisfaction, and promotes positive referrals, revisit intention, and purchase intention, even though service failure was experienced (Basso & Pizzutti, 2016; Gohary, Hamzelu, Pourazizi, & Hanzaee, 2016; Kelley et al., 1993).

2.3.1 Recovery Efforts and Performance

There are many levels of recovery efforts in the literature. Exceptional service recovery efforts can produce a recovery paradox, where satisfaction is higher than in normal service encounters where consumers have not experienced a service failure (Haj Salem, 2013; McCollough, 2009; Michel, Bowen, & Johnston, 2009). Recovery

strategies can range from "do nothing" to doing "whatever it takes to fix the problem" (McDougall & Levesque, 1999); but to what extent do consumers expect service recovery? According to Keeffe et al. (2008), a higher level of recovery is expected during a service recovery, wherein service employees offer appropriate service recovery remediation and accept the blame for the service failure.

An appropriate service recovery system should solve consumers' problems, while also ensuring their satisfaction with the recovery process, including complaint processing, response speed, and staff competence (Edvardson, Tronvoll, & Hoykinpuro, 2011; Lovelock & Wirtz, 2007). The process to rebuild the relationships between service providers and consumers either reinforces the relationships and turns them into loyalty, or otherwise compounds the failure (Maxham, 2001).

There are various dimensions of service recovery performance. Bitner (1990) identifies three recovery dimensions: (a) compensation; (b) acknowledgement; and (c) apology. A later study by Liao (2007) demonstrates four dimensions of service recovery performance: (a) apology; (b) problem solving; (c) being courteous; and (d) prompt response during service recovery. Effective service recovery performance promotes positive satisfaction, positive revisit intention, and loyalty. Many studies have confirmed that compensation seems to be a tangible measure of service recovery. For example, Casidy and Shin (2015) test compensation as a recovery strategy contributing to service recovery. However, compensation alone without an apology is inadequate in the eyes of consumers (Liao, 2007; Smith, 1997). An apology delivered in a courteous manner when performing service recovery is the most important dimension expected to be carried out to achieve a higher level of service recovery performance (see Table 2.1).

Table 2.1 Summary of Service Recovery Performance

Dimensions	Bitner (1990)	Liao (2007)	Casidy and
			Shin (2015)
1. Compensation			$\sqrt{}$
2. Acknowledgement	V		
3. Apology	V	V	V
5. Problem-solving		V	
6. Being courteous		V	
7. Prompt response			

Consumers expect more than compensation from a service provider in regards to service recovery. The consumer not only expects an apology; prior research shows that consumers expect an acknowledgement alongside compensation. As time loss resulting from the service failure is important to the consumer, a prompt response by frontline employees during service recovery is significantly related to consumer satisfaction, because time loss due to service failure is likely to affect consumer satisfaction negatively, which is highly relevant to revisit intention and word of mouth. This is a well-researched area in service failure (Bitner et al., 1990; Liao, 2007; Parasuraman, Zeithaml, & Berry, 1985; Smith & Bolton, 2002). The timeliness of the recovery process shows that service providers are eager to retain consumers and place a priority on consumer satisfaction. Accordingly, if consumers perceive the response as tardy, which translates into a perceived injustice, the consumer's opinion of the service providers will be that they are to be blamed (Liao, 2007). Likewise, if a consumer perceives that the recovery is undertaken in a courteous and polite manner, this will typically improve their satisfaction level (Maxham, 1998). Studies on unfavourable service recovery reveal that unsatisfactory incidents can be attributed to one or more of three types of employee behaviour: 1) how the employee responds to the service failure; 2) how the employee responds to the consumer's needs; and 3) unprompted and unsolicited employee actions (Arnold, Reynolds, Ponder, & Lueg, 2005; Bitner, 1990). In a retail setting, if a consumer encounter contains

unfavourable employee actions and responses towards service failure and service recovery it is likely to affect the consumer's recovery satisfaction and revisit intention. These include actions that violate the consumer's sense of justice, security, or comfort level, or actions that disrupt their self-esteem by way of rudeness or being perceived as unwilling to assist (Kelley et al., 1993).

According to the service recovery paradox, a high-level of service recovery performance may induce a positive consumer evaluation, and paradoxically increase more positive evaluations, such as satisfaction and positive behavioural intention, even more than if a service failure had not occurred (Haj Salem, 2013; Nikbin, Baharun, Tabavar, & Hyun, 2015). This exceptionally high-level of recovery performance should be taken as an opportunity to impress consumers following a service failure, even though service failure should not be pre-planned for this purpose. Nevertheless, courtesy, politeness, and good manners are expected when dealing with consumers during service encounters, especially during recovery.

The literature regarding the perception of frontline employees' responsibility during service failure is examined in the next sub-section, as the most effective service recoveries are those solved immediately by frontline employees (Zeithaml et al., 2013). The relation between interpersonal touch and frontline employees is also discussed.

2.3.2 Responsibility Perception of Frontline Employees

Frontline employees are expected to 'deal with people', namely to make consumers happy during service encounters. They are the first point of contact during service encounters and recovery. During service recovery, frontline employees are expected to provide remediation in a timely manner to solve the consumer's problem (Guenzi & Georges, 2010; Liao, 2007) and to ensure consumer satisfaction (Bitner,

1990; Coelho, Augusto, & Lages, 2011). Due to the prompt response required, frontline employees may not be able to escalate failed encounters to management. Therefore, without a leader to ensure service recovery performance standards, frontline employees are expected to be responsible for the entire recovery process (Guenzi et al., 2009; Punjaisri, Evanschitzky, & Rudd, 2013). Although frontline employees may not be the reason for the service failure, but they are still perceived to be responsible for the service recovery performance (Chebat & Slusarczyk, 2005; Guenzi & Georges, 2010). Consumers look to frontline employees because they are the representative of the service providers. The consumer uses their recovery performance to make cognitive and emotional judgements about whether the recovery has demonstrated sufficient effort to recover the failure (Liao, 2007). Service employees are expected to be trained regarding how to serve consumers better, including problem solving when performing service recovery (Liao, 2007). As such, service marketing literature examines how frontline employees' interpersonal skills and their interaction with consumers are crucial to service recovery success (Guenzi & Georges, 2010; McCollough, 2009; Mostafa et al., 2014).

One significant approach to understanding the consumer viewpoint regarding service failure and to predict complaint behaviour is attribution theory (Folkes, 1984), which is underpinned by equity theory (Adams, 1963). When service fails, consumers start to think about what caused the failure and who is at fault. Attribution theory plays a significant role in explaining consumers' responses to service failure. This theory views people as rational information processors, whose actions are influenced by causal inferences (Folkes, 1984; Keaveney, 2008; Koppitsch, Folkes, MacInnis, & Porath, 2013).

According to Folkes (1984), there are three causal dimensions to attribution: (a) stability; (b) locus; and (c) controllability. In this research, perceived employee responsibility, which is underpinned by the attribution theory, is utilised. As a service failure on one occasion might not predict a service failure on the next occasion, consumers assess causal stability by determining whether the causes are temporary or consistent. Consumers are likely to expect another service failure if they perceive that causes are consistent or permanent; in contrast, consumers will return if they perceive that the service failure is only temporary or situational (stability). Secondly, the locus of the causal influences affects equity reactions. Furthermore, consumers assess whether the failure is consumer related or service provider related (locus). Consumers also expect a high recovery if they perceive the failure is wholly due to the service provider. Likewise, consumers assess controllability and locus of the service failure jointly, whether the failure is controllable (controllability), and whether the service provider is responsible for the failure, which can make the consumer angry (Folkes, 1984; Keeffe, Russell-Bennett, & Tombs, 2008). However, a negative evaluation will be diminished if they assess that the failure is of their own fault (Folkes, 1984).

Along with perceived responsibility during service failure, frontline employees are expected to carry out remediation during service recovery (Liao, 2007).

Consumers expect that frontline employees are empowered to respond to recovery and apologise for any mishaps (Boshoff, 1999). Consumers need to feel that they are being treated fairly. According to McColl-Kennedy and Sparks (2003), when consumers perceive that employees should do more to recover the service failure, a negative mood state occurs; in contrast, if consumers perceive that frontline employees should do less, a positive mood state occurs.

This section describes the reasons why frontline employees are held accountable for service failure, what recovery actions are expected to be carried out, and what frontline employees should do to ensure performance recovery. Hence, it is important for this research to clearly identify the scenarios in which frontline employees are perceived to be responsible for a service failure and the relative influence of factors such as perceived interactional justice, negative moods, and interpersonal touch. As far as interpersonal touch is concerned, gender and social status are some of the factors that can affect the outcome. Besides the recovery efforts and performance and perception of frontline employee responsibility, failure severity is equally important. Hence the next section discusses failure severity and its interaction effects with perceived employee responsibility and interpersonal touch.

2.3.3 Failure Severity

Failure severity is the level of perceived intensity of a service failure (Weun et al., 2004), which depends on the loss experienced by the consumer due to a service failure. The more severe the service failure, the higher level of perceived loss. Given service failure is inevitable, besides the failure and who should be blamed, the literature on service recovery also focuses on the level of severity of the said service failure, as was examined to have significant relationship with customer loyalty and revisit intention. Perception of failure severity arises when consumers deal with service failure; it is considered as antecedents of consumers' service recovery expectation and their' responses to the service recovery. How consumers react to a service failure depends on the severity of the perceived intensity of the failure and the level of losses they perceive (Sengupta, Balaji, & Krishnan, 2015). For example, in a dining restaurant, the failure of an incorrectly delivered meal would be less

severe if the consumer has no diet restrictions. In this situation, the employee could change the servings accordingly and the consumer is less likely to perceive a big loss. In addition, according to Zeithaml et al. (1993), a customer's zone of tolerance reduces during service failure, compared to normal service encounters. While firms try to recover service failures, customer expectations increase, which can reduce recovery satisfaction (Weun et al, 2004).

Failure severity evokes affective responses during a service recovery and contributes significantly to recovery satisfaction, future intention, and word of mouth (Riaz & Khan, 2016; Smith & Bolton, 2002). The ascertainment of failure severity is the cognitive appraisal to mitigate the effect of service recovery. In some service recovery situations, failure severity is related to the effect of consumer involvement and perceived justice during service recovery (N. Kim & Ulgado, 2012). Consumers are typically involved in understanding the antecedents of the failure and in the recovery process as a means to reduce losses derived from the failure. The more severe the perceived failure is, the customers on recovery satisfaction to decide revisit intention.

2.4 TOUCH AS AN INDIVIDUAL PREFERENCE

Besides service context and the success (or failure) of service encounters, prior literature reports that acceptance of interpersonal touch is at the individual level. Comfort level with interpersonal touch influences consumption preferences and tendencies. Comfort with interpersonal touch (CT) relates to understanding whether a person is comfortable with both initiating and receiving touch, and is used to distinguish even more subtle preferences of initiation or reception of interpersonal touch (Webb & Peck, 2015). Earlier studies in the consumption context focus on the people receiving touch, but not the people initiating touch; people who are

comfortable with receiving touch are not examined about how likely they are to initiate touch. Some people naturally touch others on their arm or shoulder during a conversation, and some do not. This may eliminate generalisation of people positively or negatively affected by touch. While Webb & Peck (2015) provides insights into the comfort level of interpersonal touch in both receiving and initiating touch in various contexts, it does not examine interpersonal touch during service failure or service recovery, and does not assess potential mediating roles such as perceived interactional justice, or existing mood states. Thus, the purpose of this thesis is to specifically address consumer response to interpersonal touch during service recovery, particularly the responses when consumers perceive that the employee is responsible for the failure and when the employee is unlikely to be responsible for the failure.

Current marketing literature has over-emphasised the positive effect of interpersonal touch, noting for example that it increases shopping time, tipping in restaurants, promotes compliance, financial risk-taking, and association with trust. However, a small stream of literature notes the negative effects of interpersonal touch, such as negative store evaluations and negative brand evaluations (Martin, 2012). In addition, with the understanding from psychology literature that certain people avoid touch due to religion, gender, self-esteem, and social status (Burgoon, Guerrero, & Floyd, 2016; Kashdan et al., 2017; Stier & Hall, 1984), there remains a gap in the literature as to whether interpersonal touch (be it a touch on the forearm, or a pat on the shoulder) should continue to be used during a business communication. In what context would it have a negative effect? With the varied distinctive differences of comfort levels of people involved in interpersonal touch in the consumption context, to what extent does interpersonal touch affect consumers,

especially regarding consumers who have just encountered a service failure, and are in the midst of a service recovery process?

To date, there have been no studies on the effect of interpersonal touch during service recovery. Physical touch has been shown to have significant effects on consumer behaviour, for instance, product evaluation (Argo et al., 2006; Krishna & Morrin, 2008), store evaluation (Hornik, 1992a, 1992b; Martin, 2012), consumer relationships (Orth et al., 2013), persuasion (Peck & Wiggins, 2006), and need for touch (Peck & Childers, 2003; Peck & Johnson, 2011). On top of this, there is a need to understand what mediates the effect of interpersonal touch during a service recovery. Mediators are discussed in the next section.

2.5 SUGGESTED MEDIATORS

Earlier literature shows that perceived interactional justice, mood states, and consumer involvement during service recovery influence revisit intention, satisfaction, and word of mouth (Bambauer-Sachse & Rabeson, 2015; Blodgett et al., 1997; Maxham, 1998; Oliver, 1999; Schoefer & Ennew, 2005). In addition, consumer involvement, which has been shown to have an effect on touch (Peck & Johnson, 2011), and plays an important role during consumers' decision-making process (Puccinelli et al., 2009) and brand loyalty (Soon-Ho & Seonjeong, 2017), is also significant in mediating the effect on revisit intention and recovery satisfaction. Even though revisit intention and recovery satisfaction are not the same, recovery satisfaction is positively related to revisit intention (Tax & Brown, 1998), as the outcome of satisfaction during a service failure may reinforce the intention to revisit (Oliver, 2010). Mediators are discussed in more detail in the following sub-sections.

2.5.1 Perceived Interactional Justice

Perceived justice is the concept of fairness (Blodgett et al., 1997). Consumers evaluate and make perceptive and conceptive judgements based on the information they have. It is a three-dimensional view of the fairness concept, evolving from social exchange theory and equity theory, namely: distributive justice (*perceived fairness of compensation*), procedural justice (*perceived fairness of policies and processes*), and interactional justice (*perceived fairness of interpersonal treatment*) (Maxham, 2001). This concept of fairness is derived from the social exchange theory (Blau, 1964) and equity theory (Adams, 1963). Prior studies on this three-dimensional view of justice yield different results due to inconsistencies in the various service recovery strategies, which may be due to different study contexts (Blodgett et al., 1997; Maxham, 2001; Mostafa, Lages, Shabbir, & Thwaites, 2015; Joohyung Park, 2012).

The following definitions of the three forms of justice are widely accepted: distributive justice is the outcome consumers receive from service providers; procedural justice refers to the standard operating procedure and processes over which frontline employees have little control, and by which outcomes are allocated; and interactional justice is referred to as the interpersonal treatment consumers receive from service providers (Cropanzano & Folger, 1989; Folger, 1986; Skarlicki & Folger, 1997). Among the three dimensions, distributive justice is the most tangible measure, as it refers to the compensation (*remediation*) offered by service providers. Distributive justice in service recovery performance is the straightforward outcome of the recovery performance measure that causes consumers to evaluate the adequacy of compensation in monetary and non-monetary forms (Roschk & Gelbrich, 2014). At the same time, consumers often make service failure judgements

based on distributive justice (*the outcome*), procedural justice (*the process*), or interactional justice (*whether the failure was handled in a proper manner*) (Bamford & Xystouri, 2005).

When consumers perceive an injustice has occurred, service recovery is expected to be carried out immediately after the service fails, with or without consumer complaints (Boshoff, 2012). Furthermore, according to Liao's (2007) study on dimensions of service recovery performance, problem-solving (*procedural justice*) is one of the four dimensions alongside an apology (*interactional justice*), being courteous, and prompt responses. Issuing an apology, being courteous, and prompt responses are categorised as interpersonal treatment (Liao, 2007), which is further categorised as interactional justice. In this research, only the interactional justice dimension is tested against other variables, because whether the recovery was handled in a proper manner is likely to affect how the relationship between interpersonal touch, perceived employee responsibility, and individual comfort level influence interpersonal touch and failure severity on revisit intention, recovery satisfaction, and word of mouth. The next paragraph discusses why interactional justice is important during service recovery.

Interactional justice refers to people's sensitivity to "the quality of interpersonal treatment they receive during the enactment of organizational procedures" (Bies, 2001). It reflects the communication process, involving courtesy, politeness, and adequacy of language level (Chebat & Slusarczyk, 2005). Consumers assign higher fairness values to both distributive and procedural justice during service failure. In contrast, during service recovery, the marginal return to interactional justice is high, such as an apology and proactive and timely response (Blodgett et al., 1997; Chebat & Slusarczyk, 2005; Smith & Bolton, 2002). When

perceived interactional justice is high, consumers feel that the service recovery is being handled in a courteous manner, which makes them willing to revisit the store; otherwise, satisfaction is reduced, and consumers will be less likely to revisit the service provider in the future and would also undertake negative word of mouth (Blodgett et al., 1993; Blodgett, Wakefield, & Barnes, 1995). However, how consumers perceive interactional justice in a service recovery context remains unexplored. Consumers may feel more comfortable when someone touches them, or a consumer could feel negatively, especially when the frontline employees are fully responsible for the service failure.

2.5.2 Mood States

Negative encounters affect mood states and subsequently influence consumers' shopping intention (Swinyard, 1993b). Mood states have direct and indirect effects on shopping behaviour, as they are mild, transient, generalised, and pervasive affective states. Mood states can also be easily influenced by small occurrences within the situation (Gardner, Wansink, Kim, & Park, 2014; Maier, Wilken, Schneider, & Schneider, 2012).

The effect of affective responses mediating the relationship between perceived justice and consumer loyalty during a service recovery is well established (Chebat & Slusarczyk, 2005). Mood states basically present in every service experience, whether it is positive, neutral, or negative (Swinyard, 1993b). For instance, consumers who experience service failure but the recovery process is successful are likely to experience a positive mood state that changes the relationship of interpersonal touch, perceived employee responsibility, employee gender, and failure severity on revisit intention, recovery satisfaction, and word of mouth.

Mood information is usually acquired and used informally to facilitate social and professional interactions in a consumption setting (Gardner, 1985). Generally, knowledge of consumers' mood states in a marketing context could provide market practitioners with a more complete understanding of consumers' thoughts, feelings, and reactions; notably, in this given context, when employees are perceived to be responsible for the failure, and in the midst of the recovery process. This section examines how researchers define mood states, and how mood-as-information theory (Schwarz & Clore, 2003) and mood lifting capabilities affect consumer decisions and behavioural intention during service recovery.

Mood states may play a major role in consumer behaviour and decisionmaking, specifically in regards to willingness to pay (Maier et al., 2012), purchase
intention (Jihye Park, Lennon, & Stoel, 2005; Pelet & Papadopoulou, 2012; Spies,
Hesse, & Loesch, 1997), recovery satisfaction (Maxham, 2001; Schoefer &
Diamantopoulos, 2008), revisit intention (Puccinelli et al., 2007; Swinyard, 1993a),
and word of mouth (Luís Abrantes, Seabra, Raquel Lages, & Jayawardhena, 2013).
These studies emphasise mood as a central consumer response over cognitive
responses that result from the interaction with the respective in-store experience. In
the general context of service delivery, product display, space, music, and ambiance
can affect consumer mood states and result in either positive or negative intentions
(Jihye Park et al., 2005). However, how interpersonal touch affects consumers' mood
states and consequent revisit intention during service recovery is not yet known.

Moods are normally temporal (Maier et al., 2012). According to mood congruence theory, consumers make positive evaluations when they have positive mood states, and make negative evaluations when they have negative mood states (Bower, 1981; Forgas, 2004). Positive moods do not have a significant effect on

perceived interactional justice in a given negative event; however, negative moods do (Schoefer & Ennew, 2005). Previous studies have categorised negative, sad, anxious, and angry moods; and while some researchers have compared positive and negative moods, others have compared positive and neutral moods (Martin, 2003).

Moods result from a series of pleasant (positive) and unpleasant (negative) events. Mood states are not only influenced by scenarios and situations, such as product display, lighting, store ambiance, music, and customer service, but they can be influenced by other people in the store such as frontline employees. Mood states influence evaluation judgements according to mood-as-information theory (Schwarz, 2013). Consumers are likely to cope with a judgemental task by asking themselves, "How do I feel about it?" Consumers are likely to have negative mood states after a negative evaluation during service recovery (Smith & Bolton, 2002), as compared to consumers who have a positive encounter, who are then likely to have a positive evaluation (Schwarz, 1990). Despite consumers being exposed to a series of more tangible information, under certain circumstances consuers could use the information provided by their mood states. Schwarz (1990) concludes that the availability of competing information is influenced by circumstances in which there is no other information available and when judgement at hand is affective in nature. Further, circumstances pertaining to processing load may cause a situation to become too complex or beyond the consumer's ability to make a cognitive judgement. When in a positive mood, consumers will only undertake heuristic processing; however, when consumers are in a negative mood, detailed and elaborative processing will be carried out (Schwarz, 1990, 2013). Therefore, it is no surprise that consumers will use moodas-information processing during service recovery when the situation is too complex and beyond the consumers' ability to make a cognitive judgement. It is also easy to

link the negative mood states that could occur during service failure and recovery to the overall negative store evaluation.

Mood states lead to word of mouth, specifically negative word of mouth (Luís Abrantes et al., 2013). According to the uses and gratification theory (Blumler, 1979), negative encounters would enhance negative mood states and promote negative word of mouth. Consumers seek gratification to broadcast their dissatisfaction, such as leaving a negative remark on social media or to 'narrowcast' their dissatisfaction among their friends and families.

2.5.3 Consumer Involvement

Interpersonal touch typically leads to better consumer involvement (Burgoon, 1991). Consumer involvement is defined as the perceived relevance of a service encounter to the consumer (Zaichkowsky, 1994). It is the degree to which the consumer is inherently interested in the service that they are subscribed to and are motivated to learn more about it. Consumers can display low and high involvement in a service. For example, consumers who use a dry cleaning service are less involved and engaged with the service providers as compared to home architecture design. As the latter is engaged for a longer period, and the service produces a long-term effect, consumers are more likely to scrutinise the service attributions and engage and communicate with the service providers more closely. Consumers also have better involvement when they are making a buying decision for themselves rather than buying for others.

Service providers always seek to motivate and engage consumers in the service as it causes higher satisfaction, better post evaluation, loyalty (Bambauer-Sachse & Rabeson, 2015; Gohary, Hamzelu, & Alizadeh, 2016) and word of mouth (Maxham, 2001). Consumer involvement takes place at the individual level, whereby some

consumers are highly engaged and some are not. Service providers also motivate consumers to attend to service providers' communication for a higher level of involvement. Typically, consumers are able to make better decisions when they are more involved in the service.

Consumer involvement plays a critical role in service recovery, and prior research demonstrates the positive effect of involvement on recovery satisfaction, which subsequently influences behavioural intention (Puccinelli et al., 2009; Wang, Sun, Ma, & Han, 2016). However, little is known about the mediating effect of consumer involvement on recovery satisfaction when interpersonal touch is involved. Research gaps and research questions will be presented in next sections.

2.6 RESEARCH RATIONALE AND RESEARCH QUESTIONS

Current marketing literature has over-emphasised the positive effects of interpersonal touch (Webb & Peck, 2015), noting increased shopping time, tipping in restaurants, promoting compliance, increasing financial risk-taking, and promoting trust. However, Martin (2012) identifies negative effects of interpersonal touch, including negative store evaluations and negative brand evaluations. Overall, this research aims to address the following overarching research question:

How does interpersonal touch influence consumer response to revisit intention and recovery satisfaction during service recovery?

Researchers agree that frontline employees are essential to business success (Bitner, 1992; Gallace & Spence, 2010). They are the representatives of service providers: they handle service delivery, rectify problematic service encounters, and manage the recovery process. As frontline employees are the first point of contact during service recovery, the perception of whether frontline employees who are

handling the situation are responsible (or not responsible), and whether consumers perceive a fleeting touch, which may be representing soothing, calming, apologising, or merely to keep the consumer-employee business relationship positively (or negatively) is important. Consumer response in this study refers to the interpersonal physical touch response regarding revisit intention. Other variables may also affect revisit intention, such as failure severity. As recovery satisfaction is the antecedent to revisit intention, this research also investigates how consumer responses influence recovery satisfaction. In order to address the overarching research question, the first issue to consider is to what extent individual consumers are comfortable with interpersonal touch in the context of service recovery.

This thesis aims to determine how consumers respond to interpersonal touch from a frontline employee during service recovery, using justice theory (underpinned by equity theory (Adams, 1963)), mood congruency theory (Rusting & DeHart, 2000), attribution theory (Folkes, 1984), and the theory of consumer contamination (Argo et al., 2006). Specifically, it is posited that interpersonal touch influences consumer perceived interactional justice and has a negative effect, which subsequently influences revisit intention. If a consumer perceives that an employee is not responsible for a service failure, they are more likely to respond positively to interpersonal touch during service recovery. However, if a consumer perceives that an employee is responsible for the service failure, employee responsibility may increase the salience of the consumers' negative mood states. Furthermore, this research aims to determine what occurs when perceived interactional justice and mood states are in conflict, as far as consumers' revisit intention in a service recovery situation is concerned. In addition, this research also tests the mediating effects of consumer involvement to revisit intention and recovery satisfaction during

service recovery, when frontline employees are perceived to be responsible and when they touch consumers.

This study theorises that both perceived interactional justice and mood states mediate the joint effect of interpersonal touch and the perceived employee responsibility on revisit intention. To summarise, both mood states and perceived interactional justice are likely to affect consumers' revisit intention with the presence of the interpersonal touch, but perceived employee responsibility will impact the extent to which these cognitive judgements and mood states affect revisit intention. When perceived employee responsibility is low, the negative mood is not salient and perceived interactional justice is greater among those with the presence of an interpersonal touch; this subsequently promotes a positive effect on revisit intention. In contrast, when perceived employee responsibility is high, a negative mood becomes salient, for example, a consumer may feel angry if they expected frontline employees to do more but they didn't, and consumers are unlikely to revisit based solely on the presence of interpersonal touch. Taken together, perceived interactional justice, rather than negative moods, will be the primary driver of the positive effect of interpersonal touch on revisit intention with low perceived employee responsibility; however, when perceived employee responsibility is high, a negative mood will drive a negative effect of interpersonal touch on store revisit intention. Thus, perceived interactional justice and the negative effect of service recovery will mediate the joint effect of interpersonal touch and perceived employee responsibility on revisit intention. Moreover, with the contribution of CT measure, this research tests the individual comfort level regarding its effects as to what extent perceived interactional justice and mood states mediate the effect of individual comfort level of interpersonal touch on revisit intention during service recovery.

Perceived interactional justice, mood states, and consumer involvement are found to have a significant effect on recovery satisfaction and revisit intention. However, this literature review has identified that the same mediators have not been examined for their effect when a frontline employee touches a consumer who is perceived to be treated fairly, or a consumer who display a positive mood due to a recovery paradox. The literature has also not examined whether there is an effect on consumers who experience negative mood states induced due to service failure. It remains to be assessed whether interpersonal touch involving a consumer who enjoys visiting the service provider, even though the service encounter is no longer positive, is an effective strategy, or whether the frontline employee should touch a consumer perceived to be highly involved during the service encounter, which may enhance the service recovery process.

It is not yet known whether consumers will be happy to be touched, specifically by frontline employees, particularly when the frontline employees are responsible (or not responsible) for the failure. Thus, this thesis examines intentional interpersonal touch and its effect on service recovery in a bid to fill the missing gaps in the literature. This theoretical background has focused on the various constructs believed to have an effect on consumer revisit intention during the service recovery process and discussed the possible factors that influence revisit intention, namely perceived justice, mood states, consumer involvement, and interpersonal touch. Interpersonal touch during normal service encounters may achieve positive evaluation, as discussed above. In the absence of interpersonal touch studies on service recovery, there is no evidence regarding how interpersonal touch would work in a service recovery context, and whether or not interpersonal touch will contribute

to recovery satisfaction which leads to revisit intention. The hypotheses development will be further rationalised in the following chapters.

2.7 CONCLUSION

This chapter presented a synthesis of the literature pertaining to interpersonal touch and service recovery, specifically the influence of interpersonal touch on revisit intention. In particular, the chapter has examined the responsibility perception of frontline employees during service recovery, including employee gender and failure severity. This chapter also addressed the literature related to interpersonal touch, notably including the definition and types of touch, touch avoidance, and touch measures. An evaluation of the literature has identified key research gaps that provide opportunities for further research investigation. Research questions were subsequently developed to address these research gaps.

The next chapter reports Study 1 include the hypotheses development and research methodology used for this thesis in order to achieve the research objectives and answer the broad research question.

Chapter 3: Study One – The Effect of Interpersonal Touch by Frontline Employees During Service Recovery on Revisit Intention

3.1 INTRODUCTION

This chapter presents the first study of this thesis. Section 3.2 develops the hypotheses. These research hypotheses are used in all studies in this research to examine interpersonal touch in a service recovery context, based on the literature review provided in this chapter. The research model and hypotheses in this research examine the direct and mediating positive/negative effects of interpersonal touch, perceived employee responsibility, comfort level with interpersonal touch, perceived interactional justice, mood states, and consumer involvement, on revisit intention during service recovery. Section 3.3 discusses the methodology and research design. Specifically, it presents the methodology to be used with details about research design which include research procedure, research justification, experimental manipulation and scenario development, population, sampling and participation, ethical consideration and data collection procedure. Section 3.4 presents the data analysis. This followed by the result of study one, which includes preliminary data preparation and analysis, reliability test and internal consistency, manipulation check, realism check, confounding check, correlation test, univariate general linear model test, testing CT as a covariance, and hypotheses test. Section 3.5 discusses the results and Section 3.6 concludes. Finally, this chapter concluded with the discussion section for study one (see Figure 3.1).

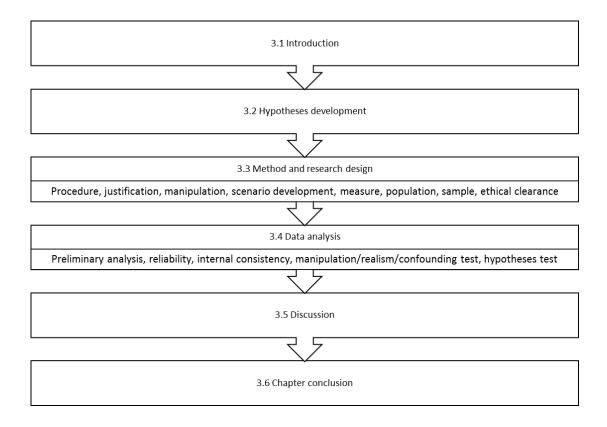


Figure 3.1 Outline of Chapter Three

3.2 HYPOTHESES DEVELOPMENT

Interpersonal touch has a positive influence on behavioural outcomes, increasing compliance, shopping time, tips, and fostering a commercial friendship (Rosenbaum et al., 2015). There are positive and negative effects derived from interpersonal touch, as people touch for different motives and functions. A wealth of literature has shown that touch has both positive and negative effects on evaluations, including studies assessing touching products (Childers, Carr, Peck, & Carson, 2001; Haas & Kenning, 2014; Krishna & Morrin, 2008; Krishna & Schwarz, 2014; Peck & Childers, 2003; Peck & Wiggins, 2006) and touching people (Guenzi et al., 2009; Hornik, 1992a; Hultén, 2011; Kashdan et al., 2017; Levav & Argo, 2010; Martin, 2012; Martin & Nuttall, 2017; Orth et al., 2013; Webb & Peck, 2015). However, the findings are ambiguous and inconsistent across varied contexts.

In the context of retail stores, frontline employees who touch consumers during business conversations somehow increase product evaluation and purchase intention (Hornik, 1992a; Orth et al., 2013). Prior literature shows that people accept and avoid touch for various reasons, and receiving touch from different gender has an effect (Hall, 1996; Kashdan et al., 2017; Martin, 2012; Stier & Hall, 1984). Consumers who are able to endure stress and uncertainty like to reach out to touch to gain information, cope with uncertainties, and to seek comfort (Van Horen & Mussweiler, 2014).

Despite these documented benefits of interpersonal touch that include higher tipping, more compliance, better store evaluation and better revisit intention, but according to the theory of consumer contamination (Argo et al., 2006), interpersonal touch may results in negative experience as touch is contagious. Some consumers still perceive that interpersonal touch should match the intimacy of the relationship for it to be considered appropriate. Therefore, when frontline employees have no perceived intimacy with the consumers, they would perceive touch from frontline employees as inappropriate (Hertenstein et al., 2006). Hence, during a service recovery, whether an interpersonal touch positively affects revisit intention remains to be investigated. Therefore, this discussion leads to the following research hypotheses:

Hypothesis 1: Interpersonal touch during service recovery has a negative effect on revisit intention.

Moreover, it could easily be perceived that female frontline employees touch consumers more than men due to their perceived nurturing natures; however, men are more likely to touch due to their dominant natures. Although gender is not the sole contributor to touch perception in the consumption setting, it is well documented in

the interpersonal touch literature. According to the theoretical framework of gender differences in touch (Henley, 1977), men touch women more than women touch men due to the traditionally higher social status of men in the 1970s and 1980s (Stier & Hall, 1984).

In this study, interpersonal touch is tested together with its interaction effect when frontline employees, who are the ones consumers turn to when a failure occurs, and they are the one expected to carry out the recovery (Liao, 2007). As gender is one of the key factors that contribute to touch avoidance, this study tests the effects of employee gender on revisit intention. In general, female consumers are more likely to respond positively when male service employees handle the recovery instead of female employees (McColl-Kennedy et al., 2003). On the contrary, consumers acknowledge and appreciate recovery more when it is carried out by a same-gender (as opposed to opposite-gender) frontline employee. Several studies examine the effect of consumer gender in recovery (Bamford & Xystouri, 2005; McColl-Kennedy et al., 2003), but neglect to study employees' gender. The perceived responsibility of frontline employees by consumers and the reasons why they should be held responsible are also discussed in this thesis. Moreover, the importance of the employee's gender should be taken into account, as it may change the perception of employee responsibility, which could also change the effects of perceived employee responsibility, alongside interpersonal touch, on revisit intention during service recovery. Employee gender is explored in this thesis to delineate the differences when a consumer is touched by a male and a female frontline employee. Based on this, hypothesis 2 is developed:

Hypothesis 2: Interpersonal touch by a male employee during service recovery has a more negative effect than female employee on revisit intention.

During the service recovery, consumers make a judgement regarding whether the employee is responsible for the service failure (Folkes, 1984; Koppitsch et al., 2013). During a service recovery, consumers expect frontline employees to carry out remedial actions immediately after the incident occurs (Liao, 2007). The range of recovery performance and strategies carried out by the service provider represents a second chance for the service provider to retain the consumer's business. However, when the frontline employees are perceived to be responsible for the negative experience and are blamed according to Folks' (1984) attribution theory, this may negatively influence consumers' revisit intention. Moreover, this has not been tested together with interpersonal touch during a service recovery. With the contribution of attribution theory and the process of satisfaction disconfirmation, this leads to the following hypotheses:

Hypothesis 3: Perceived employee responsibility during service recovery has a negative effect on revisit intention.

Hypothesis 4: Perceived employee responsibility during service recovery moderates the effect of interpersonal touch on revisit intention; touch from a responsible employee reduces revisit intention.

Consumers determine their behavioural intention with an overall evaluation of the recovery experience, which includes perceived justice (Haj Salem, 2013; Maxham, 1998). In the context of interpersonal touch, this study investigates the effects of perceived interactional justice (discounting the effects of procedural and distributive justice), as interpersonal touch only potentially affects the outcome via the mediating effect of perceived interactional justice. Being courteous during service recovery is likely to cause a positive outcome. Interactional justice is found to mediate the relationship between failure severity and loyalty (Weun et al., 2004), satisfaction (Liao, 2007) and word of mouth (Hocutt, Bowers, & Todd Donavan,

2006). Interactional justice has a positive effect on recovery satisfaction (Ok, 2004) but it has not been tested in the scenario where the employee is perceived to be responsible for the negative service encounter, and when the frontline employee engages in interpersonal touch. Among others, perceived interactional justice may be the primary driver of the positive effect of interpersonal touch on revisit intention when perceived employee responsibility is low. Thus, perceived interactional justice will mediate the joint effect of interpersonal touch and perceived employee responsibility on revisit intention. This leads to the following hypothesis:

Hypothesis 5: Perceived interactional justice will mediate the positive effect of interpersonal touch on revisit intention when perceived employee responsibility is low.

Prior research identifies that if frontline employees are perceived to act rudely, or provide unsolicited advice when handling a negative service encounter, consumers are likely to experience negative mood states (Schwarz, 2013). Besides perceived interactional justice, the literature also tests the mediating effect of mood states during service recovery on revisit intention. Mood states affect the overall store evaluation, facilitating consumers' judgement of their current shopping experience and future intention (Puccinelli et al., 2007; Schwarz, 2004; Swinyard, 1993a). It is understood that consumers in a good mood typically provide a better store evaluation and more positive shopping intention than consumers in a bad mood. However, according to mood protection mechanisms, consumers seek to stay in a good mood (Isen, Daubman, & Nowicki, 1987; Mackie & Worth, 1989; Swinyard, 1993a).

Consumers in a good mood are not willing to undertake cognitive elaboration and negative thoughts, and good mood states may positively bias their circumstances.

According to Swinyard (1993), although consumers initially in a positive mood should respond more positively to a positive service encounter than consumers in a

negative mood, their exposure to a negative service encounter could place them in a negative mood state, causing them to react to this deteriorated mood condition. Thus, mood states during service recovery will mediate the joint effect of interpersonal touch and perceived employee responsibility on revisit intention. This leads to the following hypothesis:

Hypothesis 6: Mood states will mediate the negative effect of interpersonal touch during service recovery on revisit intention when perceived employee responsibility is high.

Specifically, the objectives of this study are three-fold: (i) to test the effect of interpersonal touch and perceived employee responsibility on revisit intention during service recovery; (ii) to examine the gender effect of interpersonal touch on revisit intention; and (iii) to examine whether perceived interactional justice and mood states mediate the relationship between interpersonal touch and revisit intention during service recovery. A conceptual framework for this study is illustrated in Figure 3.2:

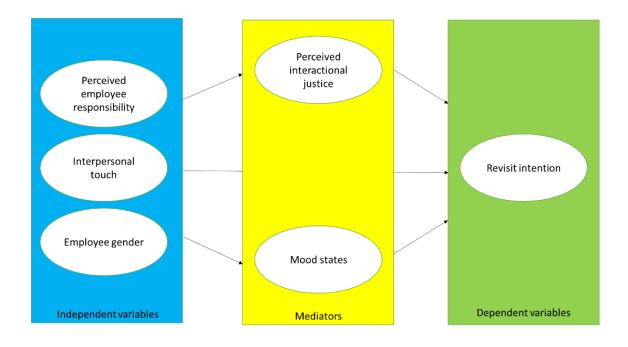


Figure 3.2 Conceptual Framework for Study One

3.3 METHOD DESIGN AND JUSTIFICATION

This study investigates the effect of interpersonal touch on revisit intention.

Recovery scenarios are presented in eight video clips representing eight scenarios, respectively. Scenarios are randomly assigned to participants whereby participants are required to watch only one of the assigned video clips, and then respond to a set of questionnaires. The independent variables (interpersonal touch and perceived employee responsibility) are manipulated in the eight scenarios. Employee gender is also controlled, with four scenarios for male and female (see Table 3.1). The respective scenarios are assigned to participants randomly.

Table 3.1 Factorial design terms and notation for Study 1

	Interpersonal Touch (IT)				
Perceived Employee		No touch		Touch	
Responsibility	Low	Low PER/a	absent IT	Low PER/pr	resent IT
(PER)	Employee gender	Male (1)	Female (2)	Male (5)	Female (6)
	High	High PER/	absent IT	High PER/p	resent IT
	Employee gender	Male (3)	Female (4)	Male (7)	Female (8)

3.3.1 Research Justification

In order to investigate revisit intention during service recovery as outlined in previous chapters, this research uses between-subjects experimental design. This experimental design has been widely used in service marketing, specifically in service recovery (Boshoff, 2012; Smith & Bolton, 2002). The advantage of using experiments is two-fold. First, experiments allow the researcher to manipulate the independent variables and control for extraneous effects. Secondly, a role-play

scenario-based method allows research to be conducted around ethically sensitive topics that would otherwise induce stress and unease for research participants. The scenario-based method used in this research was approved by university ethics approval procedure as low risk according to the standards of the National Statement on Ethical Conduct in Research Involving Humans (2007).

In addition, factorial design is suitable for three reasons: (a) it allows investigation and identification of interactions between the variables; (b) it allows straightforward testing of treatment combinations; and (c) since it is an interaction, it requires fewer units which fulfils budget concerns (Shadish, Cook, & Campbell, 2002).

The scenario analysis experimental design is the best option for the present study. Other research methodologies, such as personal interviews, focus groups, and field interviews or field observations, are not appropriate as in experiments, one can control the manipulations and test only the required conditions. Participants in personal interviews or focus groups may be reluctant to reveal individual preference information, as participants are not promised anonymity; field interviews or field observations could challenge Australian ethical limitations and will not be ethically approved. Moreover, to find out the causal relationship, experimental design is the best option because it allows manipulations of variables, unlike the correlational method and observational method, which are only able to observe two or more variables that correlate to one another, and are unable to identify relevant interference and interactions (Field & Hole, 2002).

This study aims to examine the causal relationship and the effect of interpersonal touch on revisit intention, with the direct and interactive effect of interpersonal touch, perceived employee responsibility, and employee gender on

revisit intention. It further tests perceived interactional justice and three mood states (positive mood, neutral mood, and negative mood) as mediators. The experimental design utilised in this study was first presented in early psychology literature (Juni & Brannon, 1981), and is a commonly used method to examine interpersonal touch (Dolinski, 2010; Hertenstein et al., 2006; Levav & Argo, 2010; Martin, 2012; Orth et al., 2013; Peck & Childers, 2003). In the context of service recovery, the scenario-based experimental design was first presented in Bitner (1990) in early service research and has since been championed as a viable method to analyse service failure and recovery. This choice of experimental design is now a common method used in service research (Chang, 2006; Holloway, Wang, & Beatty, 2009; Maxham, 1998; McColl-Kennedy & Sparks, 2003; Sembada, Tsarenko, & Tojib, 2016).

Scenario-based

There are several types of scenario-based experimental design, including role-play, written scenario, and video-based scenario. As service failure may make someone emotionally affected, which will challenge research ethics, a role-play scenario in a lab is not ideal. Although a written scenario has been criticised for its low involvement, it allows the researcher to manipulate service recovery variables, control for external influences, and measure results without violating ethical standards (Schoefer, 2008). Study 1 uses a video-based scenario that retains the benefits of a written scenario while also providing better understanding for participants.

Type of touch

There are a several common types of touch in the field of consumer research, such as a light touch on the forearm (Burgoon, 1991), a pat on the shoulder (Levav & Argo, 2010), and a handshake from an acquaintance, for example from a frontline

employee. This research focuses on touch on non-intimate body regions to eliminate the pressure of sexual complications and to emphasize only the employee-consumer interpersonal touch during a service recovery. In a normal workplace or marketplace, a light touch on the forearm may represent the intention to achieve closer proximity. During a normal business communication, a pat on the shoulder may represent building trust and has been found to promote better financial risk taking (Levav & Argo, 2010).

The type of touch and how it affects the consumer is discussed in detail in this study, which examines revisit intention in a courier service context, specifically studying the effect during service recovery. An appropriate and effective service recovery could turn a service failure into a favourable service encounter. Hence, it is important to acknowledge the benefit of a successful service recovery and how this may be achieved at a high-performance level in order to retain consumers.

Respective scenarios were assigned to participants randomly, and participants were only allowed to access to one scenario. Hence, this random assignment was held. As for how the experiments were carried out, it will be discussed in detail in the next section.

3.3.2 Experimental Manipulation and Scenario Development

This study is a 2 (interpersonal touch: no touch/touch) x 2 (perceived employee responsibility: not responsible/responsible) x 2 (employee gender: male/female) experimental between-subject factorial design with video-based scenarios. Since no one shall produce the role-play field experiments to include the negative service encounters such as recovery process to fulfil the ethical challenge, the video-scenario adopted to collect data to suit the affordable data collection cost. The video-based scenario developed to streamline the understanding between researcher and

participants. Interpersonal touch (no touch/touch), perceived employee responsibility (not responsible/responsible) and employee gender (male/female) are tested as manipulated variables, with eight cells manipulating interpersonal touch, perceived employee responsibility, and employee gender. As this is a 2x2x2 experimental design, 282 (more than 30 respondents for each cell x 8 cells) Australian consumers are recruited.

This study investigates the service context of a courier service, a practical service that is easy for consumers to understand and relate to. . Courier service is a common service that everyone easy to relate to. It is a practical service, and generally when we buy online, we are allowed to select the preferred logistic partner online. To achieve the manipulation and to test the hypotheses, the scenarios need to: (a) describe service failure and recovery; (b) illustrate employees' responsibility for the negative encounters; and (c) illustrate physical touch. In this study, the physical touch used is *a touch on the forearm*, which appears to be a common business gesture in consumption settings. The scenarios use a second-person narrative to describe courier service encounters. As the scenarios are video-based, the situation and scripting for the designed scenarios are presented in Table 3.2.

Table 3.2 Scripting for full experimental video-based scenarios

Scenario 1 Not responsible/ No touch / Male (1)	The system shows that the parcel was delivered a week ago, after many complaints from the consumer, the parcel is finally found and delivered today (recovery).	
	Employee apologises to the consumer with a smile, no touch.	
Scripts (scenario 1)	(Employee takes the parcel from a pile of parcels, and passes the parcel to consumer)	
	Sorry for the long wait and all the confusing SMS made from the system, yeah it was first said this thing had been delivered according to the system, which made you a bit worried, didn't it?	
	Sorry about that. You have a good day. (smile)	

Scenario 2 Not responsible/ No touch / Female (2)	The system shows that the parcel was delivered a week ago, after many complaints from the consumer, the parcel is finally found and delivered today (recovery). Employee apologises to the consumer with a smile, no touch.
Scripts (scenario 2)	(Employee takes the parcel from a pile of parcels, and passes the parcel to consumer) Sorry for the long wait and all the confusing SMS made from the system, yeah it was first said this thing had been delivered according to the system, which made you a bit worried, didn't it? Sorry about that. You have a good day. (smile)
Scenario 3 Responsible/ No touch/ Male (3)	The employee was supposed to deliver the parcel a week ago, instead, the parcel was delivered to the wrong building. After many complaints from the consumer, the parcel is finally found and delivered today (recovery). Employee apologises to the consumer with a smile, no touch.
Scripts (scenario 3)	(employee takes the parcel from a pile of parcels) Here you go this is your parcel. I have been searching for this building. I mistakenly gave it to the reception in the wrong building. Luckily I have it back. (Employee passes the parcel to consumer) Sorry for the long wait and all the confusing SMS made from the system, yeah this item has been delivered according to the system. It is all my fault, sorry for that. You have a good day. (smile)
Scenario 4 Responsible/ No touch/ Female (4)	The employee was supposed to deliver the parcel a week ago, instead, the parcel was delivered to the wrong building. After many complaints from the consumer, the parcel is finally found and delivered today (recovery). Employee apologises to the consumer with a smile, no touch.
Scripts (scenario 4)	(employee takes the parcel from a pile of parcels) Here you go this is your parcel. I have been searching for this building. I mistakenly gave it to the reception in the wrong building. Luckily I have it back. (Employee passing the parcel to consumer)

	Sorry for the long wait and all the confusing SMS made from the system, yeah this item has been delivered according to the system. It is all my fault, sorry for that. You have a good day. (smile)
Scenario 5 Not responsible/ touch / Male (5)	The system shows that the parcel was delivered a week ago, after many complaints from the consumer, the parcel is finally found and delivered today (recovery).
	Employee apologises to the consumer with a pat on the forearm (touch).
Scripts (scenario 5)	(Employee takes the parcel from a pile of parcels, and passes the parcel to consumer)
	Sorry for the long wait and all the confusing SMS made from the system, yeah it was first said this thing had been delivered according to the system, which made you a bit worried, didn't it?
	Sorry about that. You have a good day.
	(employee gives consumer a pat on the forearm)
Scenario 6 Not responsible/ Touch/ Female (6)	The system shows that the parcel was delivered a week ago, after many complaints from the consumer, the parcel is finally found and delivered today (recovery). Employee apologises to the consumer with a pat on the forearm (touch).
Scripts (scenario 6)	(Employee takes the parcel from a pile of parcels, and passes the parcel to consumer)
	Sorry for the long wait and all the confusing SMS made from the system, yeah it was first said this thing had been delivered according to the system, which made you a bit worried, didn't it?
	Sorry about that. You have a good day. (employee gives consumer a pat on the forearm)
Scenario 7 Responsible/ Touch/ Male (7)	The employee was supposed to deliver the parcel a week ago, instead, the parcel was delivered to the wrong building. After many complaints from the consumer, the parcel is finally found and delivered today (recovery).
	Employee apologises to the consumer with a pat on the forearm (touch).
Scripts (scenario 7)	(employee takes the parcel from a pile of parcels)
(Section 10 1)	Here you go this is your parcel. I have been searching for this

	building. I mistakenly gave it to the reception in the wrong building. Luckily I have it back. (Employee passes the parcel to consumer) Sorry for the long wait and all the confusing SMS made from the system, yeah this item has been delivered according to the system. It is all my fault, sorry for that. You have a good day. (employee gives consumer a pat on the forearm)
Scenario 8 Responsible/ Touch/ Female (8)	The employee was supposed to deliver the parcel a week ago, instead, the parcel was delivered to the wrong building. After many complaints from the consumer, the parcel is finally found and delivered today (recovery). Employee apologises to the consumer with a pat on the forearm (touch).
Scripts (scenario 8)	(employee takes the parcel from a pile of parcels) Here you go this is your parcel. I have been searching for this building. I mistakenly gave it to the reception in the wrong building. Luckily I have it back. (Employee passes the parcel to consumer) Sorry for the long wait and all the confusing SMS made from the system, yeah this item has been delivered according to the system. It is all my fault, sorry about that. You have a good day. (employee gives consumer a pat on the forearm)

For participation, video-based scenarios were produced and uploaded to YouTube (www.youtube.com). Participants are asked to play the randomly assigned YouTube video embedded in the questionnaire, after the participant information consent page. During the pre-production stage, models are carefully selected from the same ethnic group, with similar hair and eye colour as both male and female service employees in the videos. The service employees in the videos wear identical uniforms, include t-shirts, caps, and staff identity cards. Audition of models for the videos was conducted online, with a general email sent to the Faculty of Creative

Industry of QUT. Models were carefully selected to achieve the similarity in terms of outlook and spoken slangs. The small parcel used in all scenarios is identical. Videos are referenced in Table 3.3.

Table 3.3 YouTube video hyperlinks

			Manipulations	
Scenarios	Video	Interpersonal Touch	Perceived Employee Responsibility	Employee Gender
Scenario 1	https://youtu.be/bssUTX c7CEE	No touch	Not responsible	Male
Scenario 2	https://youtu.be/kuswM 4syvlk	No touch	Not responsible	Female
Scenario 3	https://youtu.be/vkGh0 M-fLpw	No touch	Responsible	Male
Scenario 4	https://youtu.be/OjBMM wvACMA	No touch	Responsible	Female
Scenario 5	https://youtu.be/FNKsX C6WYjs	Touch	Not responsible	Male
Scenario 6	https://youtu.be/NOhZP Dv5hSM	Touch	Not responsible	Female
Scenario 7	https://youtu.be/QF3_W dSfwAA	Touch	Responsible	Male
Scenario 8	https://youtu.be/OVKJe iuBkPY	Touch	Responsible	Female

3.3.3 Sample

A convenience sample comprises 282 Australian adults aged between 18 and 65, of which 149 are male, 139 are female and 2 are of unspecified gender.

Participants are randomly assigned to one of the eight scenarios, without consideration of demographic information such as age, gender, or income group. The random assignment was conducted by SSI, a market research firm that has Australian panel members who are representative of the population in terms of age and gender, which helps to improve the internal validity of the experiment (Zikmund, 2003).

Links generated from the Key Survey online survey platform were sent to the SSI

administrator to disseminate to their members and re-direct them to the members' portal upon the completion of the questionnaire. Participants were informed via the participant information consent page, which stated how and what the questionnaire is about; their rights to participate and withdraw; and where the results would be made available.

For the experimental design, each cell should comprise 50 participants, but for factorial design, as the effects will cross over from one factor to another to test the causal relationship, the number required will be half (Shadish et al., 2002). The number of participants in each cell was monitored online in real-time to ensure each cell achieved at least 30 participants. This resulted in a total of eight cells of approximately equal cell size, ranging from 34 to 36 completes.

As this study utilises a quantitative experimental design targeted on general consumers, a non-probability sampling method is used because it does not require any basis for estimating the probability of the population to be included in the sample (Kothari, 2004). Using a convenience sample is justifiable (Churchill & Iacobucci, 2006) because every individual is a customer, consumer, and end-user themselves. The chances of people experiencing service recovery are likely to be the same. The target gender for this study is both male and female for the purpose of collecting results to analyse variance of both genders (see Table 3.4).

Table 3.4 Summary of Population

Particulars	Study 1
Total number of sample (n)	282
Age	18 – 65
Gender	Male/female
Sample Type	Convenience
Randomisation	True random
Population source	SSI – online
Data collection duration	8 days

Date collection time-line June 2016

The study sample is recruited from all states and territories in Australia. The participant gender is adequate to represent the Australia population as both genders are almost equally recruited. The mean age of the participants is 40.44 years (SD=12.94). More than 41 (14.5%) participants did not provide information regarding their household income, and the majority of participants have a household income of less than \$104,000 (56.7%). Most of the participants (72%) did not identify themselves as having experienced a negative service encounter in the last three months, but this study still recruited 79 participants who did experience a negative service encounter in the last three months (28%). Distinct from the mandatory questions for the variables, participants are given freedom to choose whether to reveal their demographic information or not. Table 3.5 presents sample characteristics for Study 1.

Table 3.5: Sample demographic characteristic for Study 1

Items		Frequency	
Gender	Male	141	
	Female	139	
	Not answered	2	
Age	25 and below	40	
	26 to 35	71	
	36 to 45	66	
	46 to 55	59	
	56 and above	42	
	Not answered	4	
Household income	Less than \$52,000	76	
	\$52,000 to \$103,999	84	
	\$104,000 to \$155,999	43	
	\$156,000 to \$207,999	24	
	\$208,000 and above	14	
	Not answered	41	

3.3.4 Instrument Development and Measure

This study comprises three parts. Firstly, participants watch the video scenarios, imagine they are in the situation, and answer the questionnaire. The number of participants for each video scenario is controlled by the Key Survey online instrument, as the system automatically refuses submission after a desired level of participation is reached. The second part of this instrument involves a manipulation and realism check, to examine the credibility and realism of the scenario assigned, and constructs related to revisit intention, namely: (a) perceived interactional justice; and (b) mood states as mediators, with comfort derived from interpersonal touch as a covariance. The final part of the instrument comprises demographic information such as age, gender, income group, and experience with negative service encounters.

As the measurement for this study, the survey questions are designed using a seven-point Likert scale to quantify participants' viewpoints and to measure varying degrees of agreement with a series of statements (Likert, 1967). There are multiple questions about each construct to ensure internal consistency of each construct by running a reliability test before inference analysis takes place. All measurements for the constructs are operationalised by using a seven-point Likert scales (1=strongly disagree to 7= strongly agree). The scales are selected and created by modifying existing scales reported to be reliable and valid in past research. Modification was made in the wording of the items to make reference to the service context of this study.

3.3.4.1 Measurement Scale for Realism Check

Realism is important to marketing research (Healy & Perry, 2000). The realism of the experimental scenarios involves judgement derived from consumers' real-life experience. The eight written scenarios are tested using the realism and credibility test by McColl-Kennedy, Daus, and Sparks (2003) which is widely adopted in marketing research to test scenarios, especially in the realm of service failure and service recovery when actual situations cannot be investigated due to ethical limitations (see Table 3.6).

Table 3.6 Measurement Scale for Realism Check

Construct	Realism and Credibility
Source	Adapted from McColl-Kennedy, Daus, and Sparks (2003)
Summated Scale	Seven-point Likert scale anchored at end-point
	(1= strongly disagree, 7= strongly agree)
Items	1. I think that a similar problem would occur to someone in real life.
	2. I think the situations given in the scenario are realistic.
	3. I think the employee in the scenario is similar to the employees from
	other courier service companies I have seen before.

3.3.4.2 Measurement Scale for Manipulation Check

A manipulation check is essential to ensure that participants understand the manipulated items in the scenario (Blodgett et al., 1997). The two levels of interpersonal touch and two levels of perceived employee responsibility are manipulated using scenarios detailing a consumer experience with a courier service. Specifically in this experiment, a touch on the forearm is designed for the common service encounters, where frontline employees attempt to foster better relationships with close proximity (Guenzi & Georges, 2010), while the control group view scenarios where frontline employees do not touch the consumers.

The manipulation for perceived employee responsibility is designed according to role theory (Sarbin & Allen, 1954), where consumers' perception of the level of responsibility illustrated in the scenario clearly distinguishes whether the employee is fully responsible for the negative encounter, or, as is the case in the control group, where the employee is not responsible for the negative encounter (it is actually the third party integrated service provider, and thus beyond the control of the frontline employee) (see Table 3.7).

Table 3.7 Measurement Scale for Manipulation Check

Construct	Manipulation check
Source	Role Theory and Comfort with Interpersonal touch
Summated Scale	Seven-point Likert scale anchored at end-point
	(1= strongly disagree, 7= strongly agree)
Items	1. I think the employee in the scenario is responsible for the problem.
	2. In this scenario, the employee touched me.

3.3.4.3 Measurement Scale for Confounding Check

To ensure the attractiveness and likeability of the models does not have a significant effect on the results, a confounding check is conducted by asking participants about the attractiveness and likeability of the models. This confounding check is to eliminate any potential effect of attractiveness on revisit intention.

Likeability refers to participants' assessment of the frontline employees' personal attributes such as friendliness. Similarity refers to congruence and resemblance between the participants and the frontline employees regarding similar outlook, values, age, and perspectives. Attractiveness refers to participants' assessment of the frontline employees regarding their appearance, which may induce biases in the evaluation (Yi, Nataraajan, & Gong, 2011). This confounding check ensures that

likeability, similarity, and attractiveness (Doney & Cannon, 1997b) do not influence the effect of the variables on revisit intention (see Table 3.8).

Table 3.8 Measurement Scale for Confounding Check

Construct	Confounding check
Source	Doney and Cannon (1997)
Summated Scale	Seven-point Likert scale anchored at end-point
	(1= strongly disagree, 7= strongly agree)
Items	1. I think the employee in the scenario is likeable.
	2. I think the employee in the scenario is similar to the employees from
	other courier service companies I have seen before.
	3. I think the employee in the scenario is attractive.

3.3.4.4 Measurement Scale for Revisit Intention

Consumers who experience good recovery are likely to demonstrate an enhanced level of satisfaction and increased revisit intention (Smith & Bolton, 2002). This measure is adapted from Zeithaml, Berry and Parasuraman (1996), which in general describes behavioural intention as an indication of whether the consumer will remain with the company (see Table 3.9).

Table 3.9 Measurement Scale for Revisit Intention

Construct	Revisit Intention
Source	Adapted from Zeithaml, Berry & Parasuraman (1996)
Summated Scale	Seven-point Likert scale anchored at end-point
	(1= strongly disagree, 7= strongly agree)
Items	1. I would like to come back to this service provider in the future.
	2. I would engage this service provider in the future.
	3. I will probably use this service provider in the future.
	4. I plan to come back to this service provider in the future.

3.3.4.5 Measurement Scale for Perceived Interactional Justice

Perceived interactional justice in this study is hypothesized to mediate the relationship between interpersonal touch and revisit intention. Interactional justice refers to the fairness of treatment consumers expect to receive from the frontline employees (Skarlicki & Folger, 1997) (see Table 3.10).

Table 3.10 Measurement Scale for Perceived Interactional Justice

Construct	Perceived Interactional Justice					
Source	Adapted from Maxham (2001), McColl-Kennedy & Sparks (2003)					
Summated Scale	Seven-point Likert scale anchored at end-point					
	(1= strongly disagree, 7= strongly agree)					
Items	1. In this scenario, the employee was friendly.					
	2. In this scenario, the employee provided equal service to all					
	customers.					
	3. In this scenario, the employee demonstrated no bias towards me.					
	4. In this scenario, the employee was attentive in providing good					
	service.					
	5. In this scenario, the employee was sensitive in handling the situation					
	6. In this scenario, the employee demonstrated understanding to handle					
	the situation.					
	7. In dealing with the problem, the employee treated me in a courteous					
	manner.					
	8. During the effort to solve the problem, the employee seemed to care					
	about me.					
	9. While attempting to solve the problem, the employee considered my					
	point of view.					
	10. I think that I was well-informed about the situation.					

3.3.4.6 Measurement Scale for Mood States

Consumers with positive mood states typically have a positive evaluation on behavioural intention compared to consumers in neutral or negative mood states (Puccinelli et al., 2009). This study investigates positive, neutral, and negative

moods, all of which could manifest during service recovery (see Table 3.11). Positive moods do not have a significant effect on perceived interactional justice in a given negative event; however, negative moods do (Schoefer & Ennew, 2005).

Table 3.11 Measurement Scale for Mood States

Construct	Mood States
Source	Adapted from Schoefer & Ennew (2005)
Summated Scale	Seven-point Likert scale anchored at end-point (1= strongly disagree, 7= strongly agree)
Items	In this scenario, I would have a positive mood. In this scenario, I would have a negative mood. In this scenario, I would have a neutral mood.

3.3.4.7 Measurement Scale for Comfort Level with Interpersonal Touch

The CT measure scale by Webb & Peck (2015) is chosen to test the individual comfort level with interpersonal touch. To date, this is the only scale to test comfort with interpersonal touch at the individual level. Prior to this, researchers used the need for touch scale to test interpersonal touch (Orth et al., 2013), which is less appropriate as the need for touch scale tests the need to touch the product at the individual level. As the outcomes and functions of touching an inanimate product differ from interpersonal touch between consumer and another individual, this is chosen as a more relevant scale to test the effect of interpersonal touch. Other than the general interpersonal touch situation, this measure also covers two main concerns: (i) initiating touch; and (ii) receiving touch in the given scenarios (see Table 3.12). One of the items "I find myself pulling away if someone touches me" is reverse coded as this item aims to investigate to what extent participants would seek to avoid the situation. In this study, a touch on the forearm is used as it is deemed to

be appropriate non-verbal communication during a service encounter (Nuszbaum, Voss, & Klauer, 2014; Webb & Peck, 2015).

The data collected using the Likert scale is in the form of continuous variables, which are recoded using a median split. Although the median split categorisation method has been criticised for its conservativeness, loss of information, and reduction in power. However, recent research confirmed that the negativity of median split has been revoked, and supports its suitability to conduct a median split on the continuous measures in factorial experimental design to facilitate analytic ease and further compare group analysis (Iacobucci, Posavac, Kardes, Schneider, & Popovich, 2015). The recoded data is dichotomous rather than metric; therefore the median split is still appropriate and in fact advisable to match the theoretical structure of the data.

Table 3.12 Measurement Scale for CT

Construct	Comfort level of interpersonal touch					
Source	Adapted from Webb & Peck (2015)					
Summated	Seven-point Likert scale anchored at end-point					
Scale	(1= Strongly disagree, 7= Strongly agree)					
Items	1. I often put my arm around people. – initiating					
	2. I consider myself to be a more 'touchy' person than most of my friends. –					
	initiating					
	3. I feel more comfortable initiating touch than most people general					
	4. I feel more comfortable with touch than most people general					
	5. When I greet someone, it often involves touch. – initiating					
	6. When talking to people, I often touch them on the arm. – initiating					
	7. I can't help touching people when I am talking to them. – initiating					
	8. I am comfortable hugging other people. – initiating					
	9. When shaking someone's hand, I typically put my left hand on their					
	upper arminitiating					
	10. I don't mind if someone touches my arm. – receiving					
	11. When talking to someone, I don't mind if they touch me on the arm. –					

receiving

- 12. I am comfortable with people touching me. receiving
- 13. During conversation, I don't mind if people touch me. receiving
- 14. I am comfortable if a co-worker touches me on the arm when explaining something. receiving
- 15. I find myself pulling away if someone touches me. (*reverse coded*) receiving
- 16. I typically don't mind receiving touch from another person. receiving
- 17. I feel comfortable having a stranger touch me on the arm during conversation. receiving
- 18. I am comfortable having someone touch me on the shoulder to get my attention. -receiving
- 19. I don't mind if someone places their hand on my upper back to guide me into a room. -receiving

3.3.5 Ethical Clearance

This research intends to create new knowledge and an in-depth understanding of consumer behaviour. Hence, this study is conducted according to the guidelines and standards of the National Statement on Ethical Conduct in Research Involving Humans (2007) developed by the Australia National Health and Medical Research Council. The Queensland University of Technology Research Ethics Unit reviewed the application submitted online and granted ethics approval number 1600000439.

3.3.6 Data Collection Procedures

In social psychological studies, it is common to use experimental design to identify causal relationships between variables, and to use factorial design to test the interactive effect. In this thesis, all studies utilise factorial between-subject design, with independent-measures designed to test one participant for each condition. There are no inherent biases or presumptions in the questionnaire prior to participants answering the questionnaires (Field & Hole, 2002). In this study, participants are

randomly assigned a scenario, and with the evaluation of the episodic of the scenarios, participants next required to answer a series of questions.

Randomisation is important to any experimental design. It is important to allocate participants randomly to the experimental conditions in order to isolate the effects of the manipulation of the independent variables (Campbell & Stanley, 2015). Random assignment for the respective individual on different scenarios ensures that any systematic differences between the variables are spread inconsistently across all participants in order to eliminate any systematic effects on their behaviour that might be confused with the manipulations of the independent variables. Hence, to achieve a reliable and interpretable result, a true randomisation is carried out in this research, utilising between-subjects design. Participants feel less chance of practice, are randomly assigned to only one scenario, removing the fatigue effect and ensuring impartiality as the participants have no knowledge about the manipulations (Field & Hole, 2002). Participants were blinded from how the experiments were manipulated and hypotheses of the study.

3.4 DATA ANALYSIS

This study examines the consumer response to interpersonal touch during service recovery, with the mediating effect of perceived interactional justice, mood states on revisit intention, in addition to testing the individual difference of comfort level with interpersonal touch as a covariance. This section discusses the preliminary data preparation (Section 3.4.1), reliability test and internal consistency (Section 3.4.2), manipulation check (Section 3.4.3), realism check (Section 3.4.4), confounding check (Section 3.4.5), correlations test (Section 3.4.6), general linear

model test (Section 3.4.7), hypotheses testing (Section 3.4.8), and testing CT as covariance (Section 3.4.9).

3.4.1 Preliminary Data Preparation and Analysis

Prior to testing the hypotheses, the data required preparation and some preliminary tests, including a reliability test, factor analysis, manipulation test, and confounding test. This is followed by descriptive data analysis that includes means, standard deviations, and correlations between the variables. The results of this preparation and analysis are outlined below.

3.4.1.1 Data Preparation

A between-subject factorial experimental design is used to conduct this study. The data collection was conducted online using the Key Survey online data collection system, which eliminates human interaction errors and missing data by stipulating all questions as "must answer" except for demographic information. The mean for each variable was computed for further analysis purposes. Reverse coding is required for "I find myself pulling away if someone touches me". Age is recoded into age groups for ease of analysis.

3.4.2 Reliability Test and Internal Consistency

A reliability test is conducted to confirm that the scales are free from random errors. The internal consistency and reliability of the scale items are tested using Cronbach's coefficient alpha, an indication of the average correlation among the items that make up the scale, with a value from 0 to 1 (preferably nearer to 1, which indicates better reliability). According to Nunnally (1978), a minimum Cronbach's alpha value of 0.70 is necessary to consider adequate reliability, and values above

0.80 are preferable (Pallant, 2004). The output indicates revisit intention (α =0.971), and perceived interactional justice (α =0.965) have high coefficient alphas that indicates high internal consistency. The Kaiser-Meyer-Olkin (KMO) measures sampling adequacy. Higher KMO values indicate the data is more suitable for analysis and values above 0.600 are considered acceptable (Pallant, 2004). As a measure of factorability, the factors are sufficient based on 0.60 adequacy (Dziuban & Shirkey, 1974). According to Kaiser, Meyer and Olkin (1974) the range of KMO in this study are all acceptable. Table 3.13 illustrates descriptive statistics and reliability test for the variables.

Table 3.13 Descriptive Statistics and Reliability Test for Study 1

Variables	Mean	Standard Deviation	Cronbach's alpha	Kaiser- Meyer- Olkin (KMO)	Sig.
Revisit intention	4.00	1.613	0.971	0.858	0.000
Perceived interactional	4.70	1.39	0.965	0.939	0.000
justice					

3.4.3 Manipulation Check

Researchers suggest a manipulation check to ensure participants understand the manipulated scenarios and confirm the realism of the scenarios. In this study, a manipulation check is established as participants statistically understand the manipulated items and perceive significant differences between the distinct level of various experimental conditions, such as interpersonal touch (0=no touch, 1=touch), perceived employee responsibility (0=not responsible, 1=responsible) and confederate gender (0=male, 1=female). There are two manipulation checks in this study, namely employee responsibility and interpersonal touch (see Table 2). Confederate gender is not tested in the manipulation check questions, as the

scenarios are obvious. For the first manipulation check question "I think the employee in the scenario is responsible for the problem", a general linear model test for univariate between-subject effects reveals a significant effect (M²=24.418, F (1,280) =9.495, p=0.002) of the manipulated perceived employee being not responsible (M=4.21, SD=1.67) and responsible (M=4.80, SD=1.536). For the second manipulation check, "In the scenario, the employee touched me", a general linear model is used to test the univariate between-subject effects, revealing a significant effect (M²=101.63, F (1,280) =29.175, p=0.000) for the manipulated no touch (M=3.55, SD=1.78) and touch (M=4.75, SD=1.95). These results suggest that the experimental manipulations worked well and participants understand the scenarios and questionnaire during participation (see Table 3.14).

Table 3.14 Manipulation check for Study 1

Manipulation check question	Manipulated item	Sig.
1. I think the employee in the scenario is	Perceived Employee	0.002
responsible for the problem	Responsibility	
2. In the scenario, the employee touched me	Interpersonal Touch	0.000

3.4.4 Realism Check

The realism and credibility of the scenarios are tested to confirm that participants perceived the scenarios as realistic. Mean scores for each of the eight scenarios suggest that participants agree that "a similar problem could occur to someone in real life" and that "the situation given in the scenario was realistic" (see Table 3.15). As a result of this realism check, the scenarios are deemed to be appropriate for this study.

Table 3.15 Realism check I and II for Study 1

Realism Check I: I think that a similar			Realism Check II: I think the situations			
problem would occur to someone in real		given in the scenario are realistic.				
life.						
Scenarios	Mean	Standard	Scenarios	Mean	Standard	
		Deviation			Deviation	
Scenario 1	5.42	1.339	Scenario 1	5.44	1.340	
Scenario 2	5.54	1.336	Scenario 2	5.41	1.019	
Scenario 3	5.37	1.374	Scenario 3	5.36	1.245	
Scenario 4	5.53	1.383	Scenario 4	5.61	1.379	
Scenario 5	4.97	1.636	Scenario 5	4.74	1.704	
Scenario 6	5.29	1.338	Scenario 6	5.50	1.164	
Scenario 7	5.36	1.246	Scenario 7	4.91	1.579	
Scenario 8	5.54	1.314	Scenario 8	5.56	1.186	

3.4.5 Confounding Check

A confounding check is used to ensure the discriminant validity of the three manipulated items in this study. There are two realism check questions (realism 1 = I think that a similar problem would occur to someone in real life; realism 2 = I think the situations given in the scenario are realistic (Doney & Cannon, 1997a). There are three frontline employee attractiveness check questions (*I think the employee in the scenario is attractive; I think the employee in the scenario is likeable*; and *I think the employee in the scenario is similar to employees from other courier service companies I have seen before*). Discriminant validity is necessary to ensure none of the manipulated items confounds one another.

A general linear univariate model is used that tests all the confounding check questions (above) as dependent variables and manipulated items (interpersonal touch, employee responsibility, and employee gender) as independent variables to assess discriminant validity. As expected, participants' perception of realism, scenario

similarity, confederate likeability, and attractiveness are not significantly affected by the manipulated items of perceived employee responsibility; hence the confounding check is established, with a p-value of 0.109 when more than 0.05 is considered as not significant. However, it is interesting to note that the significant effect of confederate gender and touch condition are found to have an effect on participants' perception of realism, scenario similarity, confederate likeability and attractiveness. Hence, the confounding check is not statistically established as the p-value is <0.05 (see Table 3.16). When this confounding occurs, Purdue and Summer (1986) suggest that further analysis should be carried out to examine the severity of the confounding effect and if this level of severity impairs an unambiguous evaluation of the results of the main experiment. In this study, variables are further analysed with correlations and a general linear model for confirmation.

Table 3.16 Confounding check for Study 1

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Confederate Gender	17.293	1	17.293	17.198	.000
Perceived Employee Responsibility	2.603	1	2.603	2.588	.109
Interpersonal Touch	5.118	1	5.118	5.090	.025

3.4.6 Correlations Test

Correlation analysis is used to test the strength and direction of the linear relationship between the two variables. Table 3.17 presents the Pearson correlations test between the variables, recording only significant correlations. Interpersonal touch is significantly negatively correlated to revisit intention (r = -0.129), perceived interactional justice (r = -0.134), and positive mood (r = -0.157) where p<0.05. Perceived employee responsibility is significantly positively correlated to revisit intention (r = 0.273), perceived interactional justice (r = 0.274), and positive mood

states (r = 0.187), where p <0.01. Employee gender is significantly positively correlated to revisit intention (r = 0.122), perceived interactional justice (r = 0.208), and positive mood (r = 0.128). Perceived interactional justice is significantly positively correlated to revisit intention (r = 0.708), correlated positively to positive mood (r = 0.788), and neutral mood (r = 0.136), but correlated negatively to negative mood states (r = -0.425). Revisit intention is significant positively correlated to positive mood (r = 0.643), and negatively correlated to negative mood (r = 0.643), and negatively correlated to negative mood (r = -0.334).

Table 3.17 Correlations test between the variables for Study 1

	1	2	3	4	5	6	7	8
1.Interpersonal touch	-							
2.Perceived	-	-						
Employee								
Responsibility								
3.Employee gender	-	-	-					
4. Perceived	-0.134*	0.274**	0.208**	-				
Interactional Justice								
5. Positive mood	-	0.187**	0.128*	0.788**	-			
	0.157**							
6. Negative mood	-	-	-	-	-	-		
				0.425**	0.442**			
7. Neutral mood	-	-	-	0.136*	0.140*	-	-	
8.Revisit intention	-0.129*	0.273**	0.122*	0.708**	0.643**	-	-	-
that 0.01 th 0.07 (0.334**		

^{**}p<0.01, *p<0.05 (two-tailed)

3.4.7 General Linear Model Test - Univariate

A general linear model – univariate is used to test between-subjects effects by testing the effect of different variables on the dependent variable in this study, namely revisit intention. Both the main effect and interaction effect are tested to assess the level of significance. The main effect of interpersonal touch (M^2 =12.130,

F (1,274) =5.325, p=0.022), perceived employee responsibility (M²=55.150, F (1,274) =24.209, p=0.000), and employee gender (M²=10.292, F (1,274) =4.518, p=0.034) all have a significant effect on revisit intention. Furthermore, the interaction effect of interpersonal touch and employee gender (M²=13.668, F (1,274) =6.000, p=0.015) and interaction effect of interpersonal touch, perceived employee responsibility, and employee gender (M²=9.367, F (1,274) =4.112, p=0.044) demonstrates a significant effect on revisit intention as the p-value is less than 0.05 (see Table 3.18). However, the interaction effect of perceived employee responsibility and confederate gender (p=0.370) and the interaction effect between interpersonal touch and perceived employee responsibility (p= 0.165) show no significant effect on revisit intention.

Table 3.18 Main and Interaction Effects on Revisit Intention

Variables and interactions	Mean Square	F	Sig.
Interpersonal touch	12.130	5.325	.022
Perceived employee responsibility	55.150	24.209	.000
Employee gender	10.292	4.518	.034
Interpersonal touch x Perceived employee responsibility	4.405	1.934	.165
Interpersonal touch x Employee gender	13.668	6.000	.015
Perceived employee responsibility x Employee gender	1.834	.805	.370
Interpersonal touch x Perceived employee responsibility x Employee gender	9.367	4.112	.044

3.4.8 Hypotheses Test

After preliminary data preparation, data reliability and validity tests, the data is tested against the hypotheses. A sample t test, ANOVA, and SPSS PROCESS Macros are used to test the hypotheses in regression analysis (Hayes, 2014). The hypotheses developed in this study investigate the possible causal relationship, direct

and interaction effect of variables, and also mediation effects. For reference, only supported hypotheses are illustrated with figures.

3.4.8.1 Investigating the Effects of Interpersonal Touch

Hypothesis 1 posited that *interpersonal touch during service recovery will* have a negative effect on revisit intention. This hypothesis is tested using general linear models; with univariate three-way between-group ANOVA revealing that interpersonal touch has a significant negative effect on revisit intention (M^2 =12.130, F(1,274) = 5.325, p=0.022). Interpersonal touch will lower revisit intention ($M_{Touch} = 3.80$, $M_{No touch} = 4.21$) (see Figure 3.3). The results support this hypothesis.

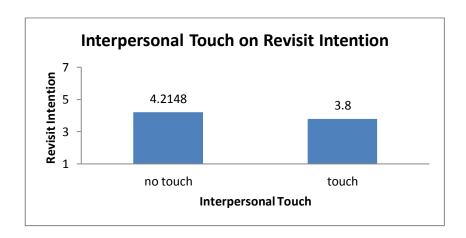


Figure 3.3 The Effects of Interpersonal Touch on Revisit Intention
3.4.8.2 Investigating the Effects of Employee Gender

Hypothesis 2 posited that interpersonal touch by a male employee during service recovery has a more negative effect than female employee on revisit intention (Figure 3.4).

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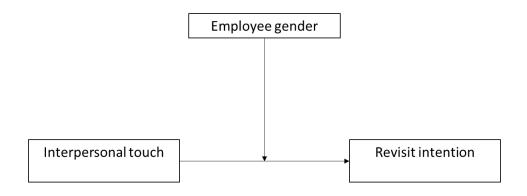


Figure 3.4 The Moderating Effects of Employee Gender

This hypothesis uses a general linear model to test employee gender as moderator, interpersonal touch as the independent variable, and revisit intention as the dependent variable. The results indicate a significant effect, as (M^2 =13.413, F (1,278) = 5.367, p=0.021). There is a significant negative effect when male employees touch the consumer ($M_{\text{No touch}} = 4.26$, $M_{\text{Touch}} = 3.39$), but no significant effect when female employees touch the consumer ($M_{\text{No touch}} = 4.19$, $M_{\text{Touch}} = 4.22$) (See Figure 3.5).

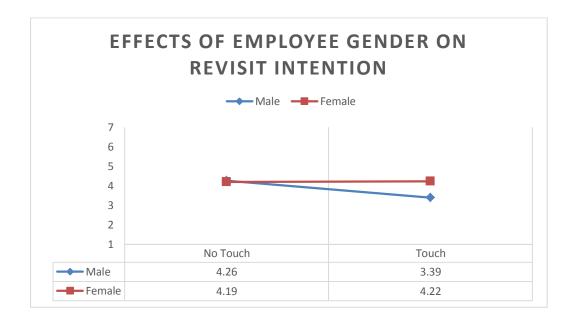


Figure 3.5 Hypothesis 2 - Effect of Employee Gender and Interpersonal Touch and Revisit Intention

To test further the male employee scenario, selected cases (n=142) are used to run a two-way ANOVA to test the effect of interpersonal touch and perceived

employee responsibility on revisit intention for male employees. A significant effect is found (M^2 =13.406, F (1,138) = 5.095, p=0.026). The results show that the mean of the no touch and touch group, and the mean of the not responsible group and responsible group are statistically significantly different. Table 3.19 indicates the estimates means between the interaction between interpersonal touch and perceived employee responsibility for male employees. No significant effect is found when select cases for female employees are run (p=0.626). Hence, this hypothesis is supported.

Table 3.19: Estimates Means, Standard Error and Confident Interval for Interaction between Interpersonal touch and Perceived Employee Responsibility for Male Employee

Interpersonal Touch	Perceived Employee	Mean	Std.	95% Confidence Interval	
	Responsibility		Error	Lower	Upper
				Bound	Bound
No touch	Not responsible	3.576	.270	3.042	4.111
	Responsible	4.914	.274	4.372	5.456
Touch	Not responsible	3.336	.274	2.794	3.878
	Responsible	3.444	.270	2.910	3.979

3.4.8.3 Investigating the Effects of Employee Responsibility

Hypothesis 3 posited that *perceived employee responsibility during service* recovery has a negative effect on revisit intention. This hypothesis is tested using general linear models; with univariate two-way between-group ANOVA revealing that perceived employee responsibility has a significant effect on revisit intention (M2=54.512, F(1,280)=22.559, p=0.000). The not responsible condition has lower revisit intention $(M_{\text{Not responsible}}=3.566)$ than the responsible condition $(M_{\text{Responsible}}=4.451)$. The results demonstrate a positive effect of perceived employee

responsibility on revisit intention. Hence, this hypothesis is not supported (See Table 3.20).

Table 3.20: Estimates Means, Standard Errors, and Confidence Intervals for Perceived Employee Responsibility on revisit intention

Perceived Employee	Mean	Std. Error	95% Confidence Interval		
Responsibility			Lower Bound	Upper Bound	
Not responsible	3.566	.128	3.315	3.818	
Responsible	4.451	.127	4.202	4.700	

To further test the effect of perceived employee responsibility, **Hypothesis 4** posited that *perceived employee responsibility during service recovery moderates the* relationship between interpersonal touch and revisit intention, in that the negative effect is stronger when employees are responsible (Figure 3.6).

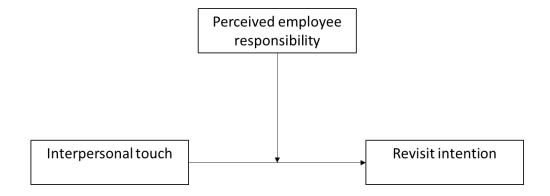


Figure 3.6 The Moderating Effect of Perceived Employee Responsibility

This hypothesis using general linear models to test perceived employee responsibility as a moderator, interpersonal touch as the independent variable, and revisit intention as the dependent variable. The results show that perceived employee responsibility does not moderate the relationship between interpersonal touch and revisit intention.

3.4.8.4 Investigating the Mediating Effects of Perceived Interactional Justice

Hypothesis 5 posited that perceived interactional justice mediates the relationship between interpersonal touch on revisit intention when employees are responsible (Figure 3.7).

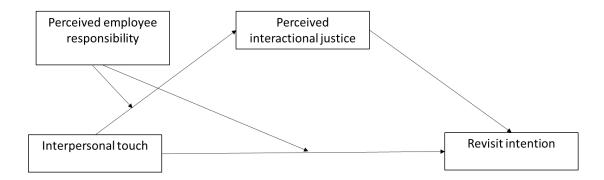


Figure 3.7 The Mediating Effect of Perceived Interactional Justice

This hypothesis uses the PROCESS Macro model 8 to test perceived employee responsibility as moderator, perceived interactional justice as a mediator, interpersonal touch as the independent variable, and revisit intention as the dependent variable. Firstly, perceived interactional justice has a significant positive relationship with revisit intention (p=0.000). An increase in perceived interactional justice predicts an increase in revisit intention from the coefficient value of 0.812.

The results show a significant positive mediating effect of perceived interactional justice with interpersonal touch on revisit intention when the employee is perceived to be responsible (Boot LLCI= -0.812, Boot ULCI = -0.142) at 95% confidence interval (95% CI). However, the results indicate there is no significant effect when employees are perceived to not be responsible. Hence, this hypothesis is partially supported. These results are further examined for male and female employee respectively.

For male employees, the interaction effect of interpersonal touch and perceived employee responsibility predicts perceived interactional justice (p=0.038, t= -2.096, 95% CI: -1.847, -0.054). There is a significant positive mediating effect of perceived interactional justice with interpersonal touch on revisit intention when the employee is perceived to be responsible (95% CI: -1.517, -0.534). However, no mediating effect is found when employees are perceived to be responsible during service recovery. For female employees, there is no significant interaction effect and no significant mediating effect is found.

3.4.8.5 Investigating the Mediating Effects of Mood States

Hypothesis 6 posited that *mood states mediate the relationship between* interpersonal touch and revisit intention when the employee is perceived to be responsible (Figure 3.8).

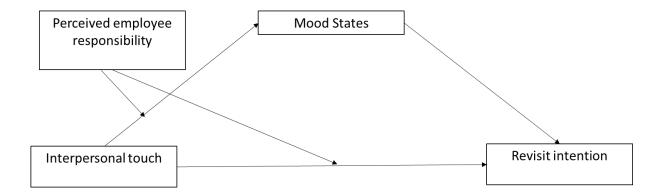


Figure 3.8 The Mediating Effect of Mood States

As this study include three distinctive mood states, this hypothesis tests three mood states: positive mood, neutral mood, and negative mood. This hypothesis uses PROCESS Macro model 8 to test perceived employee responsibility as a moderator, three respective mood states as a mediator, interpersonal touch as the independent variable, and revisit intention as the dependent variable.

Positive mood states have a significant positive relationship with revisit intention (p=0.000). An increase in positive mood states predicts an increase in revisit intention from the coefficient value of 0.546. No significant relationship is found for neutral mood and negative mood states with revisit intention.

Results show a significant positive mediating effect of positive mood states with interpersonal touch on revisit intention when the employee is perceived to be responsible (95%CI: -0.714, -0.143). However, there is no significant effect when employees are perceived to not be responsible. Hence, this hypothesis is partially supported. These results are further examined for male and female employees respectively.

For male employees, the interaction effect of interpersonal touch and perceived employee responsibility predicts mood states, particularly positive mood (p=0.034, t= -2.138, coefficient -1.257, 95%CI: -2.421, -0.094), neutral mood (p=0.001, t= 3.203, coefficient 1.917, 95%CI: 0.732, 3.101), and negative mood (p=0.017, t= 2.403, coefficient 1.294, 95%CI: 0.228, 2.360). There is a significant positive mediating effect of positive mood states with interpersonal touch on revisit intention when the employee is perceived to be responsible (95%CI: -1.468, -0.539). However, there is no mediating effect of neutral mood and negative mood when the employee is perceived to be responsible during service recovery. For female employees, there is no significant interaction effect and no significant mediating effect.

3.4.9 Summary of Hypotheses results

Study 1 proposed six hypotheses that were individually tested using general linear model ANOVA and PROCESS macros. A summary of the results is tabulated in Table 3.21.

Table 3.21 Hypotheses Tested in Study 1

Н	Hypotheses	Result	Remarks/ Value
H ₁	Interpersonal touch during service recovery has a negative effect on revisit intention	Supported	Negative effect M _{no touch} = 4.21 M _{touch} = 3.80
H ₂	Interpersonal touch by a male employee during service recovery has a more negative effect than female employee on revisit intention.	Supported	Male employee M no touch = 4.26 M touch = 3.39
H ₃	Perceived employee responsibility during service recovery has a negative effect on revisit intention.	Not supported	Positive effect M not responsible =3.566 M responsible =4.451
H ₄	Perceived employee responsibility moderates the relationship between interpersonal touch and revisit intention, in that the negative effect is stronger when employees are responsible.	Not Supported	Not significant
H ₅	Perceived interactional justice mediates the relationship between interpersonal touch and revisit intention when perceived employees are responsible.	Partially supported	Responsible p= 0.000 Coefficient =0.812 BootLLCI= -0.812 BootULCI= -0.142
H ₆	Mood states mediate the relationship between interpersonal touch and revisit intention when employees are perceived to be responsible.	Partially supported	Positive mood states only p= 0.000 Coefficient =0.546 95%CI: -0.714, -0.143 No effects on neutral and negative mood states

3.5 DISCUSSION

This study aims to answer the overarching research question:

How does interpersonal touch and perceived employee responsibility during service recovery influence consumer response to revisit intention, recovery satisfaction, and word of mouth?

Data was collected using a 2 (interpersonal touch: no touch/touch) x 2 (perceived employee responsibility: not responsible/ responsible) x 2 (employee gender: male/female) between-subjects experimental design administered via an online written survey using video scenarios. The data was first tested for reliability using Cronbach's alpha (a > 0.9) and Kaiser-Meyer-Olkin (KMO>0.8) tests, confirming that the data set is reliable for analysis.

The data was then tested using manipulation checks to confirm that participants understand the survey questions and written scenarios correctly. The participants also confirmed that the scenarios given in the questionnaire are realistic, and confounding checks were also conducted. Before inference analysis, the data was tested using a correlation test to check Pearson correlations between the variables and a general linear model test to examine the intervention on a variety of outcome measures. The general linear model (GLM) was used to test revisit intention in this study.

First of all, Section 3.5.1 discusses RQ1, followed by Section 3.5.2 examines RQ2, and Sections 3.5.3, 3.5.4, and 3.5.5 discuss RQ3.

3.5.1 The Effects of Interpersonal Touch

As Study 1 is designed to determine revisit intention in particular, this study partially answers research question 1 on revisit intention:

RQ1: to what extent is the effect of interpersonal touch during service recovery on revisit intention, recovery satisfaction, and word of mouth?

The results show that the effects of interpersonal touch during service recovery have a significantly negative effect on revisit intention (M $_{Touch}$ = 3.80, M $_{No\ Touch}$ = 4.21, p=0.031). Consumers prefer not to be touched by a stranger during service recovery despite the argument that touch could bring nurturing and calming elements

to negative encounters (Hertenstein & Keltner, 2011). This contributes to the theoretical field of interpersonal touch, reinforcing the results of a recent study that consumers might not like to be touched by a stranger (Martin, 2012). This contributes to the theory of consumer contamination (Argo et al., 2006), as touch during service recovery is contagious as it somehow disgusts the consumer. A touch from a frontline employee may aim to foster better commercial friendship (Rosenbaum et al., 2015); however, in the service recovery context, the result is negative. Therefore this variance from the majority of the literature may be the result of the particular context of this study (the service context), which is distinct from previous research in a predominantly high-end luxury context (high-end apparel/jewellery). In this study, a courier service is examined, which could be perceived to have less involvement, and hence interpersonal touch reduces revisit intention.

Rosenbaum et al (2015) propose that a touch from a male frontline employee fosters better commercial friendships, when the touch is from a homosexual male frontline employee and was not in anyway associated with sexual interest but only carries honesty, trust, and comfort. This study reveals that any touch is negatively perceived, and is in fact more negative.

When consumers are touched by a man (p=0.002, t = -3.185) compared to a woman. H₂ is supported as prior research shows that people, in general, are less likely to be touched by a male due to culture, sexual restrictions, and religion, as compared to being touched by a female (Hertenstein & Keltner, 2011). This is valid even though in the given service recovery scenarios after a service failure, consumers are less likely to accept touch from a male despite the fact that touch conveys trust, immediacy, composure and receptivity (Orth et al., 2013). The dominance element

also has no effect as consumers encountering service recovery are at the mercy of the market and act in a deterministic way (Solomon, Previte, & Russell-Bennett, 2013).

3.5.2 The Effects of Perceived Employee Responsibility

Study 1 also partially answers research question 2 on revisit intention:

RQ2: to what extent is the effect of interpersonal touch affected by perceived employee responsibility on revisit intention, recovery satisfaction, and word of mouth?

Perceived employee responsibility causes positive effects on revisit intention (p=0.000, M _{Not responsible} = 3.56, M _{Responsible} = 4.45). According to the experimental scenarios, when the delivery personnel attempt every effort to recover the service (find the parcel and send it back to the intended recipient), consumers appear to value the responsibility taken by the employee. This supports the service paradox (El-Manstrly, Liu, & Rosenbaum, 2016), namely that when the service is successfully recovered, the recovery processes performed by frontline employees are appreciated and valued by the consumer, thus increasing revisit intention and contradicting the attribution theory (Folkes, 1984).

Despite the result that higher revisit intention is gained when frontline employees are perceived to be responsible for the negative service encounters, consumers do not like to be touched (p=0.009, t=-2.6015). Nevertheless, this is not significant when frontline employees are perceived to not be responsible. There is a strong negative effect of interpersonal touch. This contributes to attribution theory, as interpersonal touch further reduces revisit intention when negative service encounters could have been better managed, consumers perceive negative service encounters are likely to recur due to mismanagement, and when employees are at fault (Folkes,

1984). Consumers do not like to be touched especially when the frontline employees are responsible for the service recovery.

Finally, this study partially answers research question 3 on the mediating effects of perceived interactional justice and mood states on revisit intention, as discussed in sub-sections 3.5.3, 3.5.4, and 3.5.5.

RQ3: to what extent is the effect of interpersonal touch affected by perceived interactional justice, mood states, and consumer involvement on revisit intention, recovery satisfaction, and word of mouth?

3.5.3 The Effects of Perceived Interactional Justice

When tested with a correlation test, perceived interactional justice is positively correlated to revisit intention (r=0.708). In addition, perceived interactional justice is also positively correlated to perceived employee responsibility (r=0.274), employee gender (r=0.208), positive mood states (r=0.788), and neutral mood states (r=0.136). It also has a negative correlation to interpersonal touch (r=-0.134) and negative mood (r=-0.425).

Statistically, when frontline employees are responsible for the service recovery, there is a significant mediating effect of perceived interactional justice on revisit intention. During service recovery, when frontline employees are perceived to be responsible, a proactive response, apology, and being courteous result in a positive effect on future behavioural intention (Blodgett et al., 1997; Liao, 2007). This supports the main findings of this study.

3.5.4 The Effects of Mood States

This study examines positive, neutral, and negative moods (Schoefer & Ennew, 2005). Positive mood states predict revisit intention (p=0.000), but neither neutral

nor negative mood states predict revisit intention. These findings contradict mood-asinformation theory (Schwarz & Clore, 2003), which suggests that positive mood
states do not signal any processing requirement and lead to a more favourable
evaluation, but negative moods may facilitate systematic processing, particularly in
this context of negative service encounters.

3.5.5 Testing Comfort with Interpersonal Touch as Covariance

As acceptance of touch is largely lay on the individual comfort level with interpersonal touch, Study 1 includes a test for comfort level with interpersonal touch (CT) as covariance. With a sample size of 282, data is dichotomised and recoded using median split (Iacobucci et al., 2015) for mean score up to 3.5263 into 0 (low CT), and recoded mean score from 3.5264 as 1 (high CT). An independent T-test is conducted to examine the mean scores of low and high CT and their effect on the variables. When testing CT with revisit intention, results show that Levene's test for equality of variance is 0.217, which means that the variance for the groups is the same (p>0.05). There is a significant difference between the low CT group (M=3.57) and high CT group (4.46) on revisit intention (p=0.000) (see Table 3.22).

Table 3.22 Testing CT as Covariance

Dependent	Mean	N	Standard	Levene's	Sig.
variable			Deviation	test	
Revisit intention	$CT_{Low} = 3.57$	n=139	1.60	0.217	0.000
	$CT_{High} = 4.46$	n=137	1.49		
	· ·				

We understand that different individuals have different comfort levels with interpersonal touch (Webb & Peck, 2015). This study tests CT as a covariance to investigate different individual's comfort level to interpersonal touch, specifically during service recovery, identifying a significant effect of low and high CT on revisit intention, perceived interactional justice, and consumer gender. The findings suggest

that further examination of CT is necessary in future studies. Interpersonal touch has statistical coefficient effects on revisit intention (p=0.031). Consumers who have a high comfort level with interpersonal touch feel more positive in overall evaluation (Webb & Peck, 2015) and hence it can promote revisit intention (Martin & Nuttall, 2017).

3.6 CONCLUSION

Study 1 aimed to examine: (1) the effect of interpersonal touch; (2) the effects of employee gender; (3) the effects of perceived employee responsibility; and (4) the effects of perceived interactional justice and mood states on revisit intention. In summary, interpersonal touch has a negative effect on revisit intention, and this negative effect is even higher when touched by a male employee. However, when an employee is perceived to be responsible for the scenario, this increases revisit intention as compared to a scenario in which the employee is perceived to not be responsible. When jointly tested with interpersonal touch, a negative effect occurs. With the result from this study, next 2 studies will be carried out to continue answer the research questions.

The next chapter presents Study 2 which includes research design and analysis; more variables will be included to address the overarching research question.

Chapter 4: Study Two – The Effects of Interpersonal Touch by a Male Frontline Employee during Recovery on Recovery Satisfaction and Revisit Intention

4.1 INTRODUCTION

The previous chapter (Study 1) confirms that interpersonal touch reduces revisit intention; that is, consumers do not like to be touched during service recovery, particularly by a male frontline employee. Results also show that revisit intention is affected by interpersonal touch when frontline employees are perceived to be responsible for the negative encounter. In addition, when mood states are positive, they mediate the effect of interpersonal touch on revisit intention when frontline employees are perceived to be responsible. Study 1 also tests the CT as a covariate, identifying that in general consumers feel less comfortable being touched during a service recovery.

As comfort level with interpersonal touch is highly individualistic, consumers who are less comfortable with interpersonal touch are less likely to express revisit intention during service recovery compared to consumers who are more comfortable with interpersonal touch. In addition, where touch is concerned, gender is always one of the factors to be examined (Brkljačić, Tarabić, & Lewis, 2017; Dibiase & Gunnoe, 2004; Hall & Veccia, 1990b; Major, Schmidlin, & Williams, 1990; Remland, Jones, & Brinkman, 1995). Study 1 reveals a significant effect of male frontline employees on the relationship between interpersonal touch and revisit intention. Interpersonal

touch reduces revisit intention if moderated by male frontline employees when perceived employee responsibility is high. However, Study 1 did not manipulate the effect of individual CT in the experiment.

Progressively, this study aims to investigate CT (Webb & Peck, 2015) as an independent variable, together with interpersonal touch and perceived employee responsibility, using a different type of touch (a pat on the shoulder) to investigate the effects of touch instigated by a male frontline employee. Study 2 examines the consumer response to interpersonal touch during service recovery, with the mediating effects of perceived justice, mood states, consumer involvement, and individual comfort level of interpersonal touch on recovery satisfaction and revisit intention. This chapter presents the second study of this thesis. Section 4.2 develops the hypotheses. Section 4.3 discusses the methodology and research design, and Section 4.4 presents the data analysis. Section 4.5 discusses the results and Section 4.6 concludes.

4.2 HYPOTHESIS DEVELOPMENT

Interpersonal touch typically creates composure, trust, equality, dominance, or affection, as compared with no touch (Gallace & Spence, 2010). Different types of touch convey different functions and meanings and have different effects on individuals (Burgoon, 1991; Levav & Argo, 2010). Although prior research has shown that touching someone on the arm while communicating increases the chances of compliance and having the request fulfilled (Dolinski, 2010), Study 1 tested this using a touch on consumer's forearm, and found that consumers do not like to be touched during service recovery. However, a light pat on shoulder, reminiscent of a maternal touch, may induce a feeling of security and relaxation (Burgoon, 1991) and connote support. This feeling of support may derive from the secure feeling of a

mother's comforting touch in the infancy period (Hertenstein et al., 2006; Levav & Argo, 2010). A momentary touch during service recovery may increase the feeling of security, which may have a positive effect to behaviour intention. The positive effects of maternal physical touch are well documented in psychology literature. Further, it is documented that a touch on the shoulder increases tipping (Hornik, 1992a) and larger orders during normal service encounters (Kaufman & Mahoney, 1999). However, a light touch on the shoulder during service recovery, when both mood and fairness judgement are at different states, specifically when consumer involvement is low (vs. high) is yet to be assessed in the literature. Study 1 supports prior research (Henley, 1977; Martin, 2012; Stier & Hall, 1984) that indicates that consumers do not like to be touched by a male employee. This could be due to several reasons, such as social status, cultural background, or level of involvement, which are believed to be highly relevant to gender (Baker & Wakefield, 2012; Russell-Bennett, McColl-Kennedy, & Coote, 2007). It is important to investigate to what extent consumers prefer not to be touched by male frontline employees, particularly in service recovery incidents. While Study 1 investigated consumer revisit intention, Study 2 aims to propose and determine the factors that affect recovery satisfaction. Conceptually, satisfaction is referred to as a purchase outcome, whereby consumers compare the benefits and costs incurred with specific consequences. According to Boshoff (2005), and derived from expectancy disconfirmation theory (Oliver, 1980), positive recovery satisfaction is when service recovery performance is greater than recovery expectation. Recovery satisfaction is discussed in the literature as an important factor that may lead to positive consumer behavioural intention and customer loyalty (Basso & Pizzutti, 2016; Riscinto-Kozub, 2008). Thus, this study re-examines hypothesis 1 as below:

Hypothesis 1: Interpersonal touch during service recovery has a negative effect on (a) revisit intention, and (b) recovery satisfaction.

This study focuses on male frontline employees as the previous study reveals that touch from a male frontline employee has an increased negative effect. Hence Hypothesis 2, which assesses employee gender effects, is not examined further in this study.

There is a wealth of literature concerning service recovery, examining consumer trust and trust recovery (Basso & Pizzutti, 2016); recovery outcomes, such as paradoxical behaviour (Haj Salem, 2013), double or triple deviation (Basso & Pizzutti, 2016; Fisk, Patricio, Edvardsson, Tronvoll, & Höykinpuro, 2011; Joireman, Grégoire, Devezer, & Tripp, 2013), recovery performance (Liao, 2007); and consumer involvement (Bambauer-Sachse & Rabeson, 2015; Cambra-Fierro, Melero-Polo, & Sese, 2015; Laurent & Kapferer, 1985). Drawing on this literature, this study re-examines hypothesis 3 and hypothesis 4 as below:

Hypothesis 3: Perceived employee responsibility during service recovery has a negative effect on (a) revisit intention, and (b) recovery satisfaction.

Hypothesis 4: Perceived employee responsibility during service recovery moderates the effect of interpersonal touch on (a) revisit intention, and (b) recovery satisfaction.

Perceived interactional justice was found to mediate the effect between interpersonal touch and revisit intention in Study 1. This study re-examines its mediating effects on revisit intention and recovery satisfaction:

Hypothesis 5: Perceived interactional justice mediates the relationship between interpersonal touch and (a) revisit intention, and (b) recovery satisfaction.

Hypothesis 6 is eliminated from this study. As CT is included in this study as independent variable, initial testing using an emotion scale was discarded due to

lacking of application of emotion to mediate the effect of CT and revisit intention and recovery satisfaction. However, with comparison, mood states are transient, temporal and better represent the affection states during service recovery. It will be tested in Study 3A and 3B.

As study 1 tested whether CT has a covariate effect on revisit intention, this study further examines CT as one of the dependent variables. Not only do consumers accept and avoid interpersonal touch in different situations, their individual differences in comfort level with interpersonal touch play a significant role in their overall store evaluation and revisit intention. This is particularly true when they are touched during service encounters when frontline employees are responsible for the negative service encounter. Therefore, these finding lead to the following hypothesis:

Hypothesis 7: CT during service recovery has a positive effect on (a) revisit intention, and (b) recovery satisfaction.

Prior research demonstrates that consumer involvement impacts behavioural intention such as revisit intention and recovery satisfaction. Service recovery always involves consumers, as service recovery is co-produced with the consumers. Santos-Vijande et al. (2013) identify two dimensions of the integrated service recovery system, which consists of internal (employees) and external (consumers) recovery. Consumer recovery refers to the extent of consumer involvement in the recovery process (Leticia Santos-Vijande, María Díaz-Martín, Suárez-Álvarez, & Belén del Río-Lanza, 2013). Hence, it is worth investigating its effect during service recovery, especially when the frontline employees are perceived to be responsible (or not responsible). Hence, this leads to the following hypothesis:

Hypothesis 8: Consumer involvement during service recovery will mediate the relationship between interpersonal touch and (a) revisit intention, and (b) recovery satisfaction when the employee is perceived to be responsible.

This experimental study utilises a 2 (perceived employee responsibility: not responsible/responsible) x 2 (interpersonal touch: no touch/touch) x 2 (CT: low/high) research design, with manipulated perceived employee responsibility and interpersonal touch. CT is recoded and dichotomised into low versus high using median split (Iacobucci et al., 2015). Specifically, the objectives of this study are four-fold: (i) to test the interaction effects of interpersonal touch and perceived employee responsibility during service recovery on recovery satisfaction; (ii) to examine the effect of individual comfort level of interpersonal touch during service recovery on revisit intention and recovery satisfaction; (iii) to test the mediating effects of perceived interactional justice during service recovery with CT on revisit intention and recovery satisfaction; and (iv) to examine the mediating effects of consumer involvement during service recovery on revisit intention and recovery satisfaction. A conceptual framework for this study is illustrated in Figure 4.1.

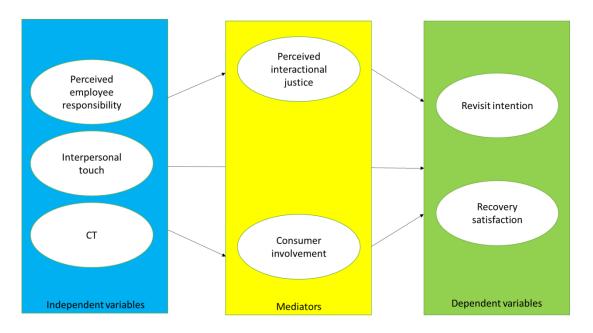


Figure 4.1: Conceptual framework for Study Two

4.3 METHOD DESIGN AND JUSTIFICATION

Building on Study 1, this study further investigates the effect of comfort level with interpersonal touch as an independent variable and consumer involvement as a potential mediator on both revisit intention and recovery satisfaction by manipulating interpersonal touch and perceived employee responsibility. Participants are randomly assigned to one of four scenarios, two with varying levels of interpersonal touch, and two with varying levels of perceived employee responsibility (Table 4.1). Different comfort levels of interpersonal touch are examined; however, no manipulation is required, as the data is recoded into low and high CT groups using a median split.

Table 4.1 Factorial Design Terms and Notation for Study 2

Factorial cells	Not responsible	Responsible
No touch	No touch Not responsible $n = 61$	No touch Responsible n =60
Touch	Touch Not responsible $n = 68$	Touch Responsible n =63

4.3.1 Research Justification

Followed the method used in Chapter 3, this study uses the same between-subject factorial experimental design, but with written scenarios. Written scenarios are developed to manipulate the negative service encounters to clearly illustrate service failure in a full-service restaurant. Participants are allowed to read back and forth carefully to imagine themselves in the respective situation. Although the written scenario method has been criticised for its low involvement level, it is the only available method to test the experiments with consideration of ethical requirements.

Type of touch

A pat on the shoulder is a normal communication gesture in a restaurant (Kaufman & Mahoney, 1999; Lynn, Le, & Sherwyn, 1998). Interpersonal touch in a restaurant context has more positive outcomes than verbal messages, leading to increased consumption and tipping, and greater compliance with meal suggestions (Gueguen, Jacob, & Boulbry, 2007). As a form of physical touch, this study utilises a pat on the shoulder, held for approximately one second, with the palm of the waiter. *Service Context*

Prior literature shows a positive effect of interpersonal touch on consumption and tipping behaviour in a restaurant context (Kaufman & Mahoney, 1999; Lynn et al., 1998). A full-service restaurant is used as the service context in this study, as consumer involvement is always high in a full-service restaurant (Bloemer & De Ruyter, 1999). This service context was chosen to test whether consumer involvement during a service recovery changes the effect of interpersonal touch.

4.3.2 Experimental Manipulation and Scenario Development

This study uses a 2 x 2 x 2 experimental between-subject factorial design with written scenarios. The written scenario-based design for data collection is widely used in service recovery research due to its robustness against biases from memory lapses, the tendency for rationalisation, and consistency factors. Perceived employee responsibility (not responsible/responsible), interpersonal touch (no touch/touch), and CT (low/high) are tested as the independent variables. There are four cells manipulating interpersonal touch and perceived employee responsibility; however, different scenarios to manipulate the CT are not used, as the responses are collected and dichotomised into low and high CT groups prior to analysis using a median split.

marketing research company). Participants are randomly assigned to one of the four scenarios. This study uses the same measurements for the manipulation and realism checks as those used in Study 1, in addition to constructs for perceived employee responsibility, perceived interactional justice, and the individual comfort level with interpersonal touch (CT), consumer involvement, revisit intention, and recovery satisfaction.

Given that Study 1 investigated the service context of a courier service, Study 2 investigates the service context of a full-service restaurant. The scenario must (a) describe a service failure and recovery; (b) illustrate employee's responsibility for the negative encounter; and (c) illustrate physical touch. A second-person narration employs direct address and thus communicates with survey participants directly. This strategy is employed to encourage deeper affective-emotional involvement, better capture the consumer perspective, and to remove gender bias. The scenario begins as follows:

You are visiting a restaurant with your family. The waiter takes your order and after waiting for about 15 minutes, the drinks are served, followed shortly after by the salads and main courses. You remember that you ordered a side order, which has not been served. When you check with the waiter, the waiter answers "No worries. Let me check!" When the waiter checks on the order screen, he finds that the side order was not ordered. He comes back to you and asks which side dish you ordered.

Following this introduction, each of the four manipulations then outline the service encounter experienced by the participant (see the next section for further details about the manipulations). In keeping with the findings of the first study that interpersonal touch may have a negative effect on revisit intention with or without perceived employee responsibility, and that the negative effect can be even stronger

when they are touched by a male frontline employee, this study focuses solely on responses with male frontline employees.

Interpersonal touch and perceived employee responsibility are manipulated by the presence of either variable (no/yes). When these manipulations are combined, the scenarios escalate from an experimental group that receives interpersonal touch and where the frontline employee is highly responsible for the negative service encounter, to a control group where there is no touch and the frontline employee is not responsible for the negative service encounter. The experimental manipulations for perceived employee responsibility are as follows:

Your family member tells you that you did not order a side dish (perceived employee responsibility: not responsible).

OR

You remind the waiter that you ordered the side dish together with the rest of the food, which was all served except this order. The waiter apologises to you (perceived employee responsibility: responsible).

The experimental manipulations for interpersonal touch are as follows:

The waiter says to you with a smile, "We can take your order now. It won't be long!" (interpersonal touch: no touch).

OR

"Let's take your order now." The waiter gives you a light pat on the shoulder.

"It won't be long!" (interpersonal touch: touch).

The resulting scenarios are presented in full in Appendix E.

4.3.3 Sample

Data for Study 2 are collected using the same sample recruitment method as in Study 1 (SSI members throughout Australia). Participants are randomly assigned to one of the four scenarios to improve the internal validity of the experiment (Zikmund, 2003), resulting in cell sizes ranging from 60 to 68. Distinct from the mandatory questions for the variables, participants are given the freedom to choose whether or not to reveal their demographic information. The final sample is representative of Australian consumers from all states and territories in Australia, with participants aged from 18 to 83, of which 118 are male (46.8%) and 134 are female (53.2%). The mean age of the participants is 45.47 (SD=16.50). The gender ratio is deemed to adequately represent the Australian population, as both genders are almost equally recruited.

The household income for the majority of the participants (52.4%) is less than \$104,000. The majority of the participants (57.8%) did not reveal their religion; however, ninety-three participants answered that they were Christian (37.1%). A total of 33.7% of participants did not answer regarding their ethnic group; however, one-third (n=84) of participants indicated that they were Australian. This study recruited 80 participants (31.7%) who had experienced a negative service encounter in the past three months. Table 4.2 presents a summary of the relevant demographic information.

Table 4.2 Demographic Characteristics for Study 2

Items		Frequency
Gender	Male	118
	Female	134
	Not answered	0
Age	25 and below	13
	26 to 35	45
	36 to 45	41

	46 to 55	42
	56 and above	73
	Not answered	18
Household income	Less than \$52,000	59
	\$52,000 to \$103,999	73
	\$104,000 to \$155,999	53
	\$156,000 to \$207,999	15
	\$208,000 and above	9
	Not answered	43
Religion	None	132
	Christianity	99
	Other faith	21
Ethnic Group	Not answered	83
	Australian	82
	Other whites	60
	Others	27
Negative service	Yes	80
experience	No	172

An online survey is used to administer the experiments. When the participants receive the email notification from SSI inviting them to participate, they click on the link embedded in the email and this takes them to the participant information sheet and the statement of informed consent. This allowed participants to understand the purpose of the questionnaire and their right to withdraw their participation. As this questionnaire was kept anonymous to the research team, participants could not withdraw after submittal.

4.3.4 Instrument Development and Measurement

This study comprises two parts. Firstly, the written scenario is used to illustrate negative service encounters and recovery. Secondly, the questionnaires (including manipulation and realism checks to examine the credibility and realism of the assigned scenario) are used to capture data, consisting of constructs related to recovery satisfaction and revisit intention: (a) perceived interactional justice; (b) mood states during service recovery effort; (c) consumer involvement profile; and (d)

comfort with interpersonal touch. The survey instrument also contains demographic information such as age, gender, income group, religion, ethnic group, and consumer experience with negative service encounters, which is tested as a covariance.

As the measurement for this study, questions are designed using a seven-point Likert scale to quantify consumers' viewpoints and measure varying degrees of agreement with a series of statements (Likert, 1967). There are multiple questions for each construct to ensure the internal consistency of each construct by running a reliability test before inference analysis. All measurements for the constructs are operationalised by using a seven-point Likert scale (1=strongly disagree, 7= strongly agree). The scale is selected and reported to be reliable and valid for the prior research. Modifications are made to the wording of the items to make reference to the service context of this study.

4.3.4.1 Measurement Scale for Realism Check

The realism measurement is adapted from McColl-Kennedy, Daus, and Sparks (2003).

4.3.4.2 Measurement Scale for Manipulation Check

The manipulation for perceived employee responsibility is designed according to role theory (Sarbin & Allen, 1954). The measurement scale for the manipulation check is based on role theory and comfort level with interpersonal touch.

4.3.4.3 Measurement Scale for Recovery Satisfaction

A good service recovery will increase recovery satisfaction (Bitner, 1990).

Recovery satisfaction in this study is developed based on the expectancy

disconfirmation theoretical framework (Oliver, 1993) to explain secondary

satisfaction following a service failure (Table 4.3). This could potentially create a recovery paradox, whereby consumer attitudes and behavioural intention are more favourable after an effective service recovery.

Table 4.3 Measurement Scale for Recovery Satisfaction

Construct	Recovery satisfaction
Source	Adapted from Maxham (2001)
Summated scale	Seven-point Likert scale anchored at end-point (1= strongly disagree, 7= strongly agree)
Items	1. I am satisfied with the service provider's service.
	2. In my opinion, this service provider provides a satisfactory service.

4.3.4.4 Measurement Scale for Revisit Intention

Consumers who experience good recovery are likely to demonstrate an enhanced level of satisfaction and increased revisit intention (Smith & Bolton, 2002). This measure is adapted from Zeithaml, Berry, and Parasuraman (1996), which in general describes behavioural intention as an indication of whether the consumer will remain with the company. The measurement scale is adapted from Zeithaml, Berry, and Parasuraman (1996).

4.3.4.5 Measurement Scale for Perceived Interactional Justice

Perceived interactional justice is one of the three-dimensional fairness concepts, along with perceived distributive justice and perceived procedural justice (Maxham, 2001). As tested in Study 1, this cognitive response provides a mediating effect to interpersonal touch on revisit intention, and this is tested against recovery satisfaction and the interactive effect with other new variables in this study. The measurement scale is adapted from Maxham (2001) and McColl-Kennedy and Sparks (2003).

4.3.4.6 Measurement Scale for Consumer Involvement Profile

Along with perceived interactional justice and emotions during service recovery, this study also tests involvement at an individual level for its indirect effect. The consumer involvement profile used in this study is widely used to test situational involvement (Laurent & Kapferer, 1985). This scale particularly diagnoses the importance, risk importance, risk probability, perceived sign value, and hedonic elements that translate into an individualistic consumer involvement profile (Table 4.4).

Table 4.4 Measurement Scale for Consumer Involvement Profile

Construct	Consumer involvement
Source	Adapted from Lauren and Kapferer (1985)
Summated scale	Seven-point Likert scale anchored at end-point (1= strongly disagree, 7= strongly agree)
Items	1. It does not matter too much if I make a mistake when I order food – (<i>importance</i>).
	2. It is very irritating to decide on a restaurant and later discover it was not nice – (<i>risk importance</i>).
	3. Dining out is extremely important to me – (<i>importance</i>).
	4. When I am searching for a restaurant, I always feel rather unsure about which restaurant to go for – (<i>risk probability</i>).
	5. You can never be quite certain of your choice of dining in a restaurant – (<i>risk probability</i>).
	6. Dining in a restaurant reflects the sort of person I am - (<i>sign value</i>).
	7. I am very interested in dining in a restaurant – (<i>pleasure</i>).
	8. Dining in a restaurant say something about who you are – (<i>sign value</i>).
	9. Whenever I dine in a restaurant, it is like giving myself a reward - (<i>hedonic</i>).
	10. I really enjoy dining in a restaurant – (hedonic).
	11. To me, dining in a restaurant is quite a pleasure – (hedonic).

4.3.4.7 Measurement Scale for CT

In addition to the consumer involvement profile, which is tested at an individual level, comfort level with interpersonal touch is also tested at an individual level. A pat on the shoulder is used in this study, as it is deemed to be an appropriate non-verbal communication gesture during a customer service interaction (Nuszbaum et al., 2014; Webb & Peck, 2015).

The data collected using the Likert scale is in the form of continuous variables, which are recoded using a median split. The median split categorisation method has been criticised because it can make analysis more conservative, resulting in a loss of information, and also a reduction in power. However, recent research has confirmed that the negativity of the median split has been revoked, and supports its suitability to conduct a median split on the continuous measures in factorial experimental design to facilitate analytic ease and further compare group analysis (Iacobucci et al., 2015). The measurement scale is adapted from Webb & Peck (2015).

4.3.5 Ethical Clearance

Ethics Unit reviewed the application submitted online and granted ethics approval (approval number: 1700000378).

To ensure this research is free from coercion, discrimination, and exploitation, participation in this study was totally voluntary. The participants implied consent by reading the participant information sheet and agreeing to take the survey. Participants were offered help from QUT Research Ethic Office and QUT Careline if needed.

4.3.6 Data Collection Procedure

Study 2 consists of two parts, namely a written recovery scenario and questionnaire (including demographic information). Participants are randomly assigned to read one of the four written service recovery scenarios (via email hyperlink) and answer the questionnaire (including demographic information). The written scenarios are used to examine the realism and credibility of the randomly assigned written scenario and the manipulated interpersonal touch and perceived employee responsibility. The second part of the instrument contains a manipulation and realism check, in addition to constructs related to recovery satisfaction and revisit intention, namely comfort level with interpersonal touch as an independent variable; perceived interactional justice, and consumer involvement as potential mediators; recovery satisfaction and revisit intention as dependent variables; and demographic information such as age group, gender, experience with service failure, and income group.

4.4 DATA ANALYSIS

Study 2 examines participant responses to interpersonal touch during service recovery, with the mediating effect of perceived justice, mood states, consumer involvement, and individual comfort level of interpersonal touch on recovery satisfaction and revisit intention. Specifically, this section discusses the preliminary data preparation (Section 4.4.1), reliability test (Section 4.4.2), manipulation check (Section 4.4.3), realism check (Section 4.4.4), confounding check (Section 4.4.5), correlations test (Section 4.4.6), general linear model test (Section 4.4.7), hypotheses test (Section 4.4.8), summary of hypotheses (Section 4.4.9), and testing demographic

information as a covariate (Section 4.4.10). This is followed by a discussion of the overall study findings in Section 4.5.

4.4.1 Preliminary Data Preparation and Analysis

In the same manner as Study 1, prior to testing the hypotheses, the data requires preparation and some preliminary tests. The results of this preparation and analysis are outlined in the following sub-sections. A between-subject factorial experimental design is used to conduct this study, and the mean for each variable is computed for further analysis. Reverse coding is required for "I find myself pulling away if someone touches me". Age, religion, and ethnic group variables are recoded into age groups, religious groups, and ethnic groups for ease of analysis.

4.4.2 Reliability Test and Internal Consistency

All tested variables have Cronbach's coefficient alpha values above 0.8, suggesting very good internal consistency and reliability. The output indicates revisit intention (α =0.967), recovery satisfaction (α =0.942), perceived interactional justice (α =0.965), positive mood (α =0.903), negative mood (α =0.898), consumer involvement (α =0.830), and CT (α =0.947) all have high coefficient alphas, representing high internal consistency.

The KMOs in this study are all acceptable. However, the KMO for recovery satisfaction is only just at the acceptable level (0.500), even though the two items in the scale are highly correlated to one another. Recovery satisfaction also has a high Cronbach's alpha (α =0.942); therefore this scale requires further analysis. Table 4.5 illustrates the descriptive statistics and reliability tests for the variables.

Table 4.5 Descriptive Statistics and Reliability Test for Study 2

	Mean	Standard Deviation	Cronbach's alpha	Kaiser- Meyer-Olkin (KMO)
Revisit intention	4.64	1.389	0.967	0.864
Recovery satisfaction	4.67	1.457	0.942	0.500
Perceived interactional	5.19	1.235	0.965	0.952
justice				
Consumer involvement	4.70	0.877	0.830	0.802
CT	3.72	1.174	0.947	0.939

4.4.3 Manipulation Check

The no-touch scenario is assigned to 121 participants and the touch scenario to 131 participants. A general linear model is used to test the univariate betweensubject effects for the manipulation check question, "In the scenario, the employee touched me", identifying a significant effect (F (6,245) =17.92, p=0.000) of the manipulated no touch (M=3.31, SD=1.936) and touch (M=5.46, SD=1.531) on the manipulation check question. The scenario in which the employee is not perceived to be responsible for the service recovery is randomly assigned to 129 participants, and the scenario in which the employee is perceived to be responsible for the service recovery is assigned to 123 participants. A general linear model is used to test for univariate between-subject effects for the manipulation check question, "I think the employee in the scenario is responsible for the problem", revealing a significant effect (F(6,245)=19.65, p=0.000) of the manipulated perceived not responsible (M=2.95, SD=1.813) and responsible (M=5.14, SD=1.489) on the manipulated check question (see Table 4.6). These results suggest that the experimental manipulations work well and participants understand the scenarios and questionnaire during participation.

Table 4.6 Manipulation Check Test for Study 2

Manipulation check question	Manipulated item	F value	Sig.
In the scenario, the employee touched	Touch	17.92	0.000
me.			
I think the employee in the scenario is	Employee	19.65	0.000
responsible for the problem.	responsibility		

4.4.4 Realism Check

Mean scores for each of the four scenarios suggest that participants agreed that "A similar problem could occur to someone in real life" (see Table 4.7), and that "The situation given in the scenario was realistic" (see Table 4.8). As a result of this realism check, the scenarios are deemed to be appropriate for this study and to operate as intended.

Table 4.7 Realism Check I for Study 2

Realism Check I: I think that a similar problem would occur to someone in real life.				
Scenarios	Mean	Standard Deviation		
Scenario 1	5.55	1.358		
Scenario 2	5.51	1.165		
Scenario 3	5.97	1.462		
Scenario 4	5.89	1.152		

Table 4.8 Realism Check II for Study 2

Realism Check II: I think the situations given in the scenario are realistic.				
Scenarios	Mean	Standard Deviation		
Scenario 1	5.43	1.477		
Scenario 2	5.46	1.125		
Scenario 3	5.95	1.443		
Scenario 4	5.81	1.148		

4.4.5 Confounding Check

A confounding check is conducted to determine the credibility of the scenarios used in this study and to ensure that the manipulated items are well controlled (Table 4.9). A univariate test is conducted to examine the two realism check items and to ensure that the manipulated touch item has no statistical effect on the manipulated item of perceived employee responsibility. There is no significant effect for realism check 1 (F (6,177) = 0.889, p=0.504) or realism check 2 (F (6,177) = 1.553, p=0.164). There is also no significant effect for the manipulated touch item (F (6,177) = 0.441, p=0.850). These results demonstrate that for the interpersonal touch item, there is no significant effect (F (6,170) = 0.352, p=0.908) on realism check 1, realism check 2 (F (6,170) = 0.740, p=0.618), or the manipulated perceived employee responsibility item (F (6,170) = 1.358, p=0.235).

Table 4.9 Summary of Confounding Check for Study 2

Manipulated	Factors	Df	Df error	F value	Sig.
item					
Perceived	Realism 1	6	177	0.889	0.504
employee	Realism 2	6	177	1.553	0.164
responsibility	Manipulated	6	177	0.441	0.850
	interpersonal touch				
Interpersonal	Realism 1	6	170	0.352	0.908
touch	Realism 2	6	170	0.740	0.618
	Manipulated perceived	6	170	1.358	0.235
	employee responsibility				

4.4.6 Correlations Test

Revisit intention is positively correlated to recovery satisfaction (r = 0.880, p=0.000), perceived interactional justice (r = 0.683, p=0.000), consumer involvement (r = 0.124, p=0.049), and CT (r = 0.247, p=0.000). Perceived employee responsibility during service recovery is negatively correlated to revisit intention (r = -0.138, p =0.029), and recovery satisfaction (r = -0.220, p=0.000). These result s

indicate that the newly added mediator, namely consumer involvement, is not statistically significantly correlated to recovery satisfaction; however, it is significantly correlated to revisit intention (r = 0.124, p=0.049), and highly correlated to perceived interactional justice (r = 0.196, p=0.002) and CT (r = 0.200, p=0.001) (see Table 4.10).

Table 4.10 Correlations Test Summary for Study 2

	1	2	3	4	5
1. Revisit intention	-				
2. Recovery satisfaction	0.880**	-			
3. Perceived interactional justice	0.683**	0.710**	-		
4. Consumer involvement	0.124*	-	0.196**	-	
5. CT	0.247**	0.220**	0.161*	0.200**	-

^{**}p<0.01, *p<0.05 (two-tailed)

4.4.7 General Linear Model Test

As correlations between revisit intention and recovery satisfaction are high (0.880, p=0.000), a univariate test is used to examine between-subjects effects by testing the effect of different independent variables on the two dependent variables, respectively. Table 4.11 illustrates a repeated univariate test between the dependent variables and independent variables/interaction effect between the independent variables.

The results indicate that interpersonal touch has no significant effect on revisit intention and recovery satisfaction (p>0.05). However, individual comfort level with interpersonal touch has a significant effect on revisit intention (M^2 =27.71, F (1,244) =15.63, p=0.00) and recovery satisfaction (M^2 =24.43, F (1,244) =12.75, p=0.00). The results also reveal that perceived employee responsibility has a significant effect

on revisit intention (M^2 =7.97, F (1,244) =4.49, p=0.04) and recovery satisfaction (M^2 =23.54, F (1,244) =12.29, p=0.00). There is no significant interaction effect on revisit intention or recovery satisfaction.

Table 4.11 Test of Between-subjects Effects for Study 2

Dependent variable	Factors	Mean square	F	Sig.
Revisit intention	Interpersonal touch	5.15	2.91	>0.05
Revisit intention	Perceived employee responsibility	7.97	4.49	0.04
Revisit intention	CT	27.71	15.63	0.00
Recovery satisfaction	Interpersonal touch	3.13	1.64	>0.05
Recovery satisfaction	Perceived employee responsibility	23.54	12.29	0.00
Recovery satisfaction	CT	24.43	12.75	0.00

4.4.8 Hypotheses Test

After running preliminary tests to confirm data reliability and validity, the data are tested against the hypotheses using SPSS ANOVA and Regression PROCESS macros.

4.4.8.1 Investigating the Effect of Interpersonal Touch

This study replicates the hypothesis test for H1. **Hypothesis 1a** posited that interpersonal touch during service recovery will have a negative effect on revisit intention.

This hypothesis is tested using general linear models and univariate three-way between-group ANOVA to examine interpersonal touch, employee responsibility, and CT as the independent variables and revisit intention as the dependent variable.

Considering the experimental nature and the sample size of the study, this study reports marginal significance at the p< 0.1 level (Hair, Black, & Babin, 2010; Pritschet, Powell, & Horne, 2016). The results demonstrate that interpersonal touch has a marginal significant effect on revisit intention (p=0.090). H1 is further tested with an independent-samples T test, indicating a marginal significant negative effect of interpersonal touch on revisit intention ($M_{No touch} = 4.81$, $M_{Touch} = 4.50$, p=0.077, t=1.775). Levene's test is non-significant (p=0.961) and thus equal variance is assumed. Consumers will have lower revisit intention after being touched during service recovery, as compared with no touch. Interpersonal touch leads to a marginal negative effect on revisit intention. Hence, this hypothesis is supported (see Figure 4.2).

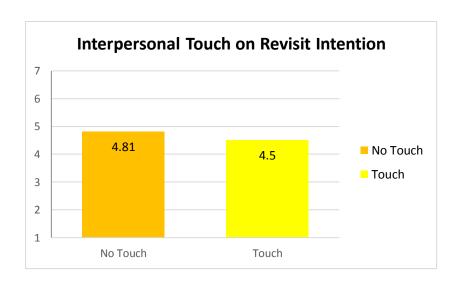


Figure 4.2: The Effect of Interpersonal Touch on Revisit Intention

Hypothesis 1b repeats the above by examining the effect on recovery satisfaction. **Hypothesis 1b** posited that *interpersonal touch during service recovery will have a negative effect on recovery satisfaction*. This hypothesis is also tested using general linear models and univariate three-way between-group ANOVA to examine interpersonal touch, employee responsibility, and CT as independent

variables and recovery satisfaction as the dependent variable. The results indicate that interpersonal touch does not have a significant effect on revisit intention (p=0.202). H1b is further tested with an independent-samples T test, demonstrating a marginal significant negative effect of interpersonal touch on revisit intention (M No touch = 4.80, M Touch = 4.55, p=0.178, t=1.352). Levene's test is non-significant (p=0.697) and thus equal variance is assumed. Consumers will have lower recovery satisfaction after being touched during service recovery, as compared with no touch. However, the effect is not significant. Hence, this hypothesis is not supported.

As study 2 only testing its effect on male employee, H2 was not included in Study 2. Next, effects of employee responsibility will be presented.

4.4.8.2 Investigating the Effects of Employee Responsibility

This study replicates the hypothesis test for H3a. **Hypothesis 3a** posited that *perceived employee responsibility will have a positive effect on revisit intention.* This hypothesis is tested using general linear models and univariate three-way betweengroup ANOV to examine perceived employee responsibility, interpersonal touch, and CT as the independent variables and revisit intention as the dependent variable. The results demonstrate that perceived employee responsibility has a significant effect on revisit intention (M^2 =7.975, F (1,244) =4.498, p=0.035). The not responsible condition has higher revisit intention ($M_{\text{Not responsible}}$ =4.828, SE=0.118) than the responsible condition ($M_{\text{Responsible}}$ = 4.470, SE=0.121). The results therefore reveal a negative effect of perceived employee responsibility on revisit intention (Figure 4.3). Hence, this hypothesis is not supported.

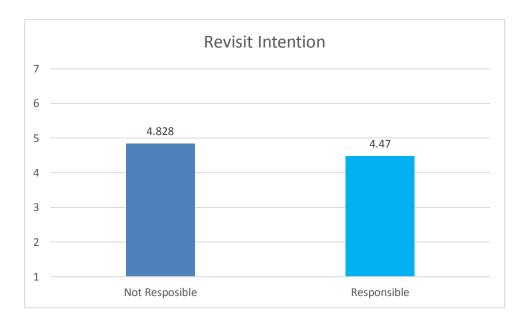


Figure 4.3: Hypothesis 3a – Effects of Perceived Employee Responsibility on Revisit Intention

Hypothesis 3b posited that perceived employee responsibility during service recovery will have a negative effect on recovery satisfaction. The results reveal that perceived employee responsibility has a significant effect on recovery satisfaction $(M^2=23.536, F(1,244)=12.289, p=0.001)$. The low responsibility condition has higher revisit intention ($M_{\text{Not responsible}}=4.976$) than the high responsibility condition $(M_{\text{Responsible}}=4.360)$. The results demonstrate a significant negative effect of perceived employee responsibility on recovery satisfaction (Figure 4.4). Hence, this hypothesis is not supported. Both the effect on revisit intention and recovery satisfaction have a negative direction, which means that revisit intention and recovery satisfaction are lower when the employee is perceived to responsible for the negative encounter, consumers blamed the employees although they are not the source for the failure, but they are the one to be blamed (Guenzi & Georges, 2010; Liao, 2007).



Hypothesis 4a and hypothesis 4b test the moderating effect of perceived employee responsibility with interpersonal touch on revisit intention and recovery satisfaction. **Hypothesis 4a** posited that *perceived employee responsibility moderates* the relationship between interpersonal touch and revisit intention, in that the positive

effect is stronger when the employee is responsible (see Figure 4.5).

Figure 4.4: Hypothesis 3b – Effects of PER on Recovery Satisfaction

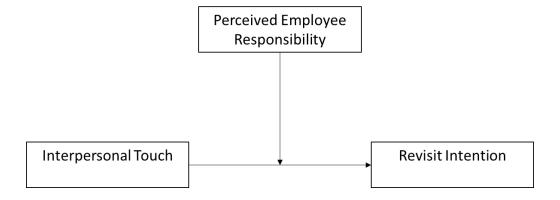


Figure 4.5: Hypothesis 4a – The Moderating Effect of PER on Revisit Intention

This hypothesis is tested using general linear models and univariate three-way between-group ANOVA to examine perceived employee responsibility, interpersonal touch, and CT as the independent variables, and the interaction effect on revisit intention. The results show that there is no significant interaction effect of

interpersonal touch and perceived employee responsibility on revisit intention (p=0.507). Hence, this hypothesis is not supported.

Hypothesis 4b repeats this test by examining the effect on recovery satisfaction. **Hypothesis 4b** posited that *perceived employee responsibility moderates* the relationship between interpersonal touch and recovery satisfaction, in that the positive effect is stronger when the employee is responsible (see Figure 4.6).

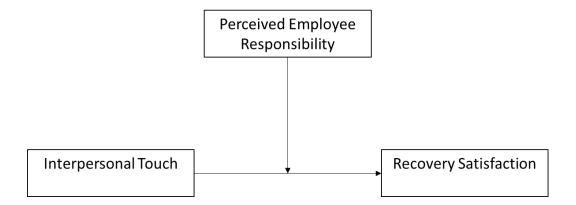


Figure 4.6: Hypothesis 4b –Moderating Effects of PER on Recovery Satisfaction

The results reveal that there is no significant effect (p=0.283). Hence,
hypothesis 4a and 4b are not supported.

4.4.8.3 Investigating the Effects of Perceived Interactional Justice

Hypothesis 5a posited that *perceived interactional justice mediates the relationship between interpersonal touch and revisit intention* (see Figure 4.7).

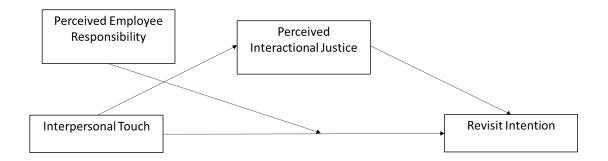


Figure 4.7: Hypothesis 5a – The Effects of Perceived Interactional Justice

This hypothesis uses PROCESS Macro model 5 to test perceived employee responsibility as moderator, perceived interactional justice as a mediator, interpersonal touch as the independent variable, and revisit intention as the dependent variable. PROCESS is the faster way to tested moderated mediation effects (Hayes, 2013). The results indicate that interpersonal touch has a significant negative effect to predict perceived interactional justice (p=0.032, t= -2.152, 95% CI: -0.641, -0.028). An increase in interpersonal touch predicts a decrease in perceived interactional justice from the coefficient value of -0.335. Perceived interactional justice has a significant positive effect to predict revisit intention (p=0.000, t= 14.087, 95% CI: 0.655, 0.867). An increase in perceived interactional justice predicts an increase in revisit intention from the coefficient value of 0.761.

There is no significant conditional direct effect (p> 0.05) of interpersonal touch on revisit intention when the employee is responsible and when the employee is not responsible during service recovery. The indirect effect of interpersonal touch on revisit intention for perceived interactional justice (95%CI: -0.493, -0.018) from the effect size of 25.5% indicates a medium effect size (Cohen, 1992).

Hypothesis 5b repeats the above by testing on the effect on recovery satisfaction. Hypothesis posited that *perceived interactional justice mediates the* relationship between interpersonal touch and recovery satisfaction (see Figure 4.8).

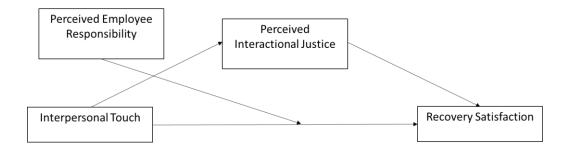


Figure 4.8: Hypothesis 5b – The Effects of Perceived Interactional Justice

Perceived interactional justice has a significant positive effect to predict recovery satisfaction (p=0.000, t= 13.870, 95%CI: 0.721, 0.839). An increase in perceived interactional justice predicts an increase in recovery satisfaction from the coefficient value of 0.839.

There is no significant conditional direct effect (p> 0.05) of interpersonal touch on recovery satisfaction when the employee is responsible and when the employee is not responsible during service recovery. The indirect effect of interpersonal touch on recovery satisfaction for perceived interactional justice (95%CI: -0.546, -0.025) from the effect size of 28.1% indicates a medium effect size (Cohen, 1992).

Study 2 tested the mediating effect of perceived interactional justice and customer involvement. Mood as a mediator was not included in Study 2. Next, effects of CT will be presented..

4.4.8.4 Investigating the Effects of Comfort Level with Interpersonal Touch

Hypothesis 7a posited that CT during service recovery has a positive effect on revisit intention.

This hypothesis is tested using general linear models and univariate three-way between-group ANOVA to examine perceived employee responsibility, interpersonal touch, and CT as the independent variables and revisit intention as the dependent variable. The results show that CT has a significant effect on revisit intention $(M^2=27.711, F(1,244)=15.630, p=0.000)$. Consumers in the low CT group have lower revisit intention $(M_{CT low}=4.315, SE=0.118)$ than those in the high CT group $(M_{CT high}=4.982, SE=0.121)$. The results demonstrate a positive effect of perceived

employee responsibility on revisit intention. Hence, this hypothesis is supported (see Figure 4.9).

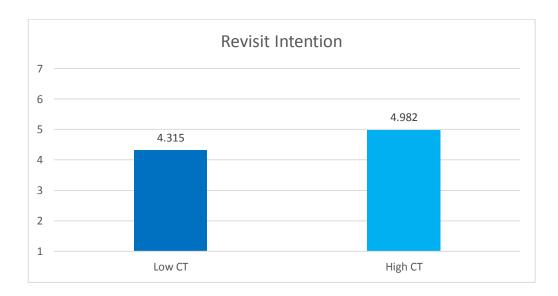


Figure 4.9: Hypothesis 7a – The Effects of CT on Revisit Intention

The same tests are repeated to test the effect of CT on recovery satisfaction. **Hypothesis 7a** *posited that CT during service recovery will have a positive effect on revisit intention.*

The results show that CT has a significant effect on recovery satisfaction $(M^2=24.427, F(1,244)=12.754, p=0.000)$. Consumers in the low CT group have lower revisit intention ($M_{CT low}=4.354, SE=0.123$) than those in the high CT group ($M_{CT high}=4.982, SE=0.126$). The results reveal that there is a positive effect of perceived employee responsibility on revisit intention. Hence, this hypothesis is supported (see Figure 4.10).

127

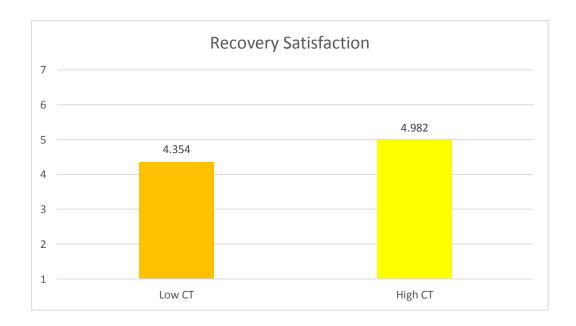


Figure 4.10: Hypothesis 7b – The Effects of CT on Recovery Satisfaction

4.4.8.5 Investigating the Effects of Consumer Involvement

Hypothesis 8a posited that *consumer involvement mediates the relationship* between interpersonal touch and revisit intention when the employee is perceived to be responsible (see Figure 4.11).

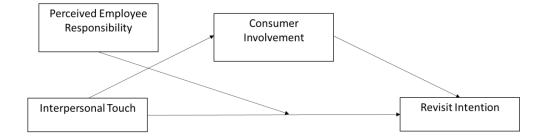


Figure 4.11: Hypothesis 8a – The Mediating Effects of Consumer Involvement

This hypothesis uses the PROCESS Macro model 5 to test consumer involvement as the mediator, interpersonal touch as an independent variable, perceived employee responsibility as the moderator to interpersonal touch, and

revisit intention as the dependent variable. The results show that interpersonal touch does not predict consumer involvement (p>0.05), and consumer involvement does not predict revisit intention (p>0.05). Hence, this hypothesis is not supported.

Hypothesis 8b repeats the above to test the effect of consumer involvement on recovery satisfaction. H8b posited that *consumer involvement mediates the* relationship between interpersonal touch and revisit intention when the employee is perceived to be responsible (see Figure 4.12).

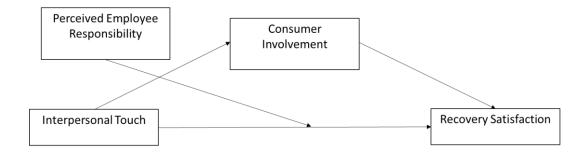


Figure 4.12: Hypothesis 8b – The Mediating Effects of Consumer Involvement

The results show that interpersonal touch does not predict consumer involvement, and consumer involvement does not predict recovery satisfaction. Hence, this hypothesis is not supported.

4.4.9 Summary of Hypotheses

Study 2 proposed hypotheses that were individually tested using independent sample t test, ANOVA and PROCESS Macros. A summary of the results is tabulated in Table 4.12.

Table 4.12: Hypotheses Tested in Study 2

Н	Hypotheses	Result	Remarks/ Value
H _{1a}	Interpersonal touch during service recovery will have a negative effect on revisit intention.	Supported	Marginal negative effect M $_{no\ touch} = 4.81$ M $_{touch} = 4.50$
H _{1b}	Interpersonal touch during service recovery will have a negative effect on recovery satisfaction.	Not supported	Not significant
H ₂	Employee gender moderates the relationship between interpersonal touch and revisit intention, in that the negative effect is stronger for male employees.		(Omitted in Study 2)
H _{3a}	Perceived employee responsibility during service recovery will have a positive effect on revisit intention.	Not supported	Negative effect M not responsible =4.83 M responsible =4.47
H _{3b}	Perceived employee responsibility during service recovery will have a positive effect on revisit intention.	Not supported	Negative effect M not responsible =4.97 M responsible =4.36
H _{4a}	Perceived employee responsibility moderates the relationship between interpersonal touch and revisit intention, in that the negative effect is stronger when the employee is responsible.	Not supported	Not significant
H _{4b}	Perceived employee responsibility moderates the relationship between interpersonal touch and recovery satisfaction, in that the negative effect is stronger when employee is responsible.	Not supported	Not significant
H _{5a}	Perceived interactional justice mediates the relationship between	Partially supported	Negative effect Coefficient = 0.761

H _{5b}	interpersonal touch and revisit intention, when the employee is perceived to be responsible. Perceived interactional justice mediates the relationship between interpersonal touch and recovery	Not supported	Effect size: 25.5% Interpersonal touch on PIJ (p=0.032) PIJ on revisit intention (p=0.000) Not significant
	satisfaction, when the employee is perceived to be responsible.		
H ₆	Mood states mediate the relationship between interpersonal touch and revisit intention when perceived employee is responsible.		(Omitted in Study 2)
H _{7a}	CT during service recovery will have a positive effect on revisit intention.	Supported	Positive M $_{\text{CT low}}$ = 4.315 M $_{\text{CT high}}$ = 4.982
H _{7b}	CT during service recovery will have a positive effect on recovery satisfaction.	Supported	Positive M _{CT low} = 4.354 M _{CT high} = 4.982
H _{8a}	Consumer involvement mediates the relationship between interpersonal touch and revisit intention when the employee is perceived to be responsible.	Not supported	Not significant
H _{8b}	Consumer involvement mediates the relationship between interpersonal touch and recovery satisfaction when the employee is perceived to be responsible.	Not supported	Not significant

4.4.10 Comparison of Demographic Groups

This section discusses tests of demographic factors using independent sample T-tests to statistically compare gender, age, religious, household income, and ethnic groups in addition to whether participants experienced negative service encounters during the last three months (yes/no). The significant demographic groups are discussed below:

131

4.4.10.1 Gender

The results show that consumer gender has no significant effect on recovery satisfaction and revisit intention in this study. Nevertheless, female participants demonstrate higher consumer involvement (M $_{\text{female}}$ =4.826) compared to males (M $_{\text{male}}$ =4.561) as the significant effect of gender found on consumer involvement (M²=4.396, F (1,250) =5.826, p=0.017).

4.4.10.2 Ethnic Group

The results show that ethnic group has a significant effect on recovery satisfaction (M^2 =6.556, F (3,248) = 3.170, p=0.025). Asians demonstrate a higher recovery satisfaction (M_{Asian} =5.250) than other ethnic groups. In addition, ethnic group also has a significant effect on perceived interactional justice (M^2 =10.646, F (3,248) =7.525, p=0.000).

4.4.10.3 Experienced a Negative Service Encounter in the Last Three Months

The same demographic factors are used to test the effect on revisit intention. The results show that there is a significant negative effect regarding participants who had encountered negative service in the past three months, as they were less likely (M $_{\text{negative service}}$ =4.353) to revisit the restaurant (M²=9.974, F (1,250) = 5.254, p=0.023), as compared to consumers who had not encountered negative service in the past three months (M $_{\text{no negative service}}$ =4.781).

4.5 DISCUSSION

This study aims to investigate the overarching research question:

How does interpersonal touch influence consumer response to revisit intention and recovery satisfaction during service recovery?

This study examines an additional independent variable (individual comfort level with interpersonal touch), an additional mediator (consumer involvement), and an additional dependent variable (recovery satisfaction) in a restaurant setting during service recovery. Building on the findings of study 1, this study focuses on male frontline employees and a different type of touch (a pat on the shoulder).

The collected data is tested for reliability, sampling adequacy, manipulation, and realism and confounding checks, in addition to hypotheses tests. The findings confirm the effects of several factors and mediators on revisit intention and recovery satisfaction, which are outlined below.

Sections 4.4.1 and 4.4.2 assess RQ1: to what extent is the effect of interpersonal touch on recovery satisfaction and revisit intention during a service recovery?

Section 4.4.3 discusses RQ2: to what extent is the effect of interpersonal touch on recovery satisfaction and revisit intention affected by perceived employee responsibility?

Sections 4.4.4 and 4.4.5 assess RQ3: to what extent is the effect of interpersonal touch on recovery satisfaction and revisit intention affected by perceived interactional justice, mood states and consumer involvement?

4.5.1 The Effects of Interpersonal touch

Interpersonal touch is found to have marginal negative effect in this context $(R^2=0.012, p=0.077)$. This may be because consumers are regularly bumped and touched in a busy restaurant setting and touch conducted by frontline employees may not be distinguishable. Although it is not statistically significant, the mean scores for hypothesis H1a (*revisit intention*) and H1b (*recovery satisfaction*) are relatively high

133

for both the touch and no touch condition (mean in the range of 4.50 to 4.80). These findings contradict the prior literature that interpersonal touch in a restaurant causes positive evaluation and higher tipping (Lynn et al., 1998), greater compliance to meal suggestions (Gueguen et al., 2007), and increased consumption (Kaufman & Mahoney, 1999). This may be due to differences in service recovery context: these three prior studies focus on normal service delivery, while this study examines a full-service restaurant.

4.5.2 The Effects of CT

Individualistic comfort level with interpersonal touch (CT) is tested as one of the independent variables in this study. CT during service recovery is found to have a significantly positive effect on revisit intention (H7a) and recovery satisfaction (H7b). An increase in consumer CT leads to higher revisit intention (R^2 = 0.061, p=0.000, $M_{CT \, high}$ =4.982, $M_{CT \, low}$ =4.315) and recovery satisfaction (R^2 = 0.048, p=0.000, $M_{CT \, high}$ =4.982, $M_{CT \, low}$ =4.354). This contributes to the theoretical framework of interpersonal touch, confirming that individuals who feel more comfortable with interpersonal touch in a consumption setting have higher satisfaction and revisit intention even though the service encounter was unsuccessful prior to recovery.

4.5.3 The Effects of Perceived Employee Responsibility

The findings confirm that the perception of responsibility reduces revisit intention (M $_{not \, responsible} = 4.83$, M $_{responsible} = 4.47$) (H $_{3a}$) and recovery satisfaction (M $_{not \, responsible} = 4.97$, M $_{responsible} = 4.36$) (H $_{3b}$). When frontline employees are perceived to be responsible for the negative service encounter, consumers are unlikely to have satisfaction during recovery and are unlikely to revisit the restaurant. Under the umbrella of attribution theory (Folkes, 1984; Koppitsch et al., 2013), which is

underpinned by equity theory (Adams, 1963), the attributional approach in this context reduces the satisfaction level and hence reduces revisit intention. Attribution theory draws on a three-dimensional measure (stability, locus, and controllability). For service recovery in a full-service restaurant context, although stability is unknown in the scenarios given, consumers may perceive that the restaurant should be blamed when the cause for failure lies entirely with the restaurant (*locus*) and they are totally volitional (*controllability*) in that they should check consumers' orders carefully to ensure accuracy. Hence, when the waiter (frontline employee) is responsible for the failure, it reduces recovery satisfaction and revisit intention.

4.5.4 The Effects of Perceived Interactional Justice

During a service recovery, when consumers perceive that they have been treated in a fair and courteous manner, their individual comfort level of interpersonal touch brings a positive effect to revisit intention and recovery satisfaction. This finding supports and contributes to equity theory (Adams, 1963), which is underpinned by social exchange theory (Blau, 1964), in which perceived interactional justice mediates the effect of individual comfort level with interpersonal touch on revisit intention and recovery satisfaction.

4.5.5 The Effects of Consumer Involvement

Statistically, there are no significant mediating effects of consumer involvement on revisit intention and recovery satisfaction. However, when consumer involvement is tested with a correlation test, it is found to be significantly correlated to revisit intention (r=0.124, p<0.05, and perceived interactional justice (r=0.196, p<0.05).

4.6 CONCLUSION

Study 2 examined the effect of perceived employee responsibility, interpersonal touch, and CT as independent variables, with perceived interactional justice and consumer involvement as mediators to assess their effects on revisit intention and recovery satisfaction. The findings motivate a more in-depth investigation including more independent variables, a different service context, and a different type of touch, which is explored in the next chapter.

Chapter 5: Study 3 – The Effects of
Interpersonal Touch, Perceived
Employee Responsibility and
Failure Severity during a Service
Recovery on Recovery Satisfaction,
Revisit Intention, and Word of
Mouth in the Service Sector

5.1 INTRODUCTION

Study 1 tested consumers' comfort level with interpersonal touch (Webb & Peck, 2015) as a covariate and found that, in general, consumers feel less comfortable being touched during service recovery. Study 2 used CT as an independent variable, and tested it together with perceived employee responsibility and interpersonal touch in addition to the mediating roles of perceived interactional justice and consumer involvement to determine revisit intention and recovery satisfaction. Recovery satisfaction and consumers' future intentions describe not only how the failure is recovered, but also the perceived intensity of the failure itself (Smith & Bolton, 2002), such as perceived losses. Study 3 examines the effect of failure severity, together with perceived employee responsibility and interpersonal touch on recovery satisfaction, revisit intention, and word of mouth. This study aims to enhance the internal validity and practical implications of the experimental model. Armed with this knowledge, providers could set up suitable work procedures and provide relevant training to frontline employees. As different types of touch (including to different body parts) engenders different levels of perceived security, this study uses a subtle fleeting touch on the arm as an alternative form of touch, distinct from a touch on the forearm (Study 1) and a pat on the shoulder (Study 2).

Word of mouth is an outcome variable that is typically tested in a service recovery context (E. L. Kim, 2012; Maxham, 2001; Spreng, Harrell, & Mackoy, 1995) along with satisfaction and revisit intention. Therefore, this study examines the effects of word of mouth, recovery satisfaction, and revisit intention in an attempt to fill existing gaps in the literature. Word of mouth is a critical behavioural intention that impacts a service provider's reputation. This study tests whether interpersonal touch, or the interaction of interpersonal touch, perceived employee responsibility, and failure severity affect on word of mouth. This chapter presents the third study of this thesis. Section 5.2 develops the hypotheses. Section 5.3 discusses the methodology and research design, and Section 5.4 presents the data analysis. Section 5.5 discusses the results and Section 5.6 concludes.

5.2 HYPOTHESIS DEVELOPMENT

Building on Study 1 and 2, this study examines the effects on word of mouth. Thus, this study re-examines the hypotheses as below:

Hypothesis 1: Interpersonal touch during service recovery has a negative effect on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth.

This experiment uses gender-neutral frontline employees, including a flight attendant (Study 3A) and plumber (Study 3B) to reduce gender biases. Employee gender is not tested in this study; hence hypothesis 2 is not applicable. Hypotheses 3 and 4 are:

Hypothesis 3: Perceived employee responsibility during service recovery has a negative effect on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth.

Hypothesis 4: Perceived employee responsibility during service recovery moderates the effect of interpersonal touch on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth.

Perceived interactional justice was found to mediate the effect between interpersonal touch and revisit intention in Study 1. This study re-examines its mediating effects on revisit intention and recovery satisfaction. Hence, hypotheses 5 and 6 are:

Hypothesis 5: perceived interactional justice mediates the relationship between interpersonal touch and (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth.

Hypothesis 6: Mood states will mediate the negative effect of interpersonal touch during service recovery on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth.

While Study 2 found that CT has a positive effect on revisit intention and recovery satisfaction during service recovery in a restaurant, in this study, CT is tested as a covariate. This study re-examines the effects of CT in a flight service and domestic plumbing service. Hence, hypothesis 7 is:

Hypothesis 7: CT during service recovery has a positive effect on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth.

Besides testing the mediating effects of perceived interactional justice and mood states on recovery satisfaction and revisit intention, this study also tests consumer involvement. As a service encounter is co-created with the consumer (Vargo & Lusch, 2014), consumer involvement shapes the experience and how the service is rendered. When a consumer perceives that they are not significantly involved in the service recovery, recovery satisfaction and repurchase intention is reduced (Roggeveen et al., 2012). This study tests the potential mediating effects of consumer involvement in the relationship between interpersonal touch, perceived employee responsibility, and failure severity on recovery satisfaction, revisit intention, and word of mouth. Therefore, hypothesis 8 is:

Hypothesis 8: Consumer involvement during service recovery will mediate the relationship between (i) interpersonal touch, (ii) perceived employee responsibility, and (iii) Failure severity; and (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth, when the employee is perceived to be responsible.

Failure severity is manipulated and tested in both Study 3A and 3B with low and high severity, distinguishing different levels of perceived intensity of a service failure. Prior research confirms that failure severity influences recovery satisfaction and word of mouth (Bitner et al., 1990; Wang et al., 2016; Weun et al., 2004). When negative encounters are more severe in origin, consumers' expectations are higher and satisfaction is typically lower, subsequently reducing revisit intention and deterring positive word of mouth. However, whether interpersonal touch can provide a calming and apologetic function during service recovery to assist with managing expectations and satisfaction remains unknown. Hence, hypothesis 9 is:

Hypothesis 9: Failure severity has a negative effect on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth.

In addition to testing the main effects of interpersonal touch, perceived employee responsibility, and failure severity, the specific objectives of this study are four-fold: (i) to explore the moderating effects of perceived employee responsibility and failure severity; (ii) to further examine the mediating effects of consumer involvement on recovery satisfaction, and revisit intention; (iii) to re-examine the effects on word of mouth; and (iv) to re-examine the effects in different service contexts and scenarios. A conceptual framework for this study is illustrated in Figure 5.1. The methodology and research design for this study are discussed in the next section.

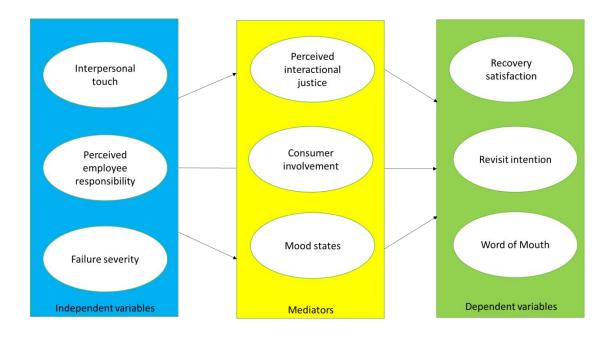


Figure 5.1 Conceptual Framework for Study 3

5.3 METHOD DESIGN AND JUSTIFICATION

Following Study 1 and 2, this study used an experimental design to continue the investigation of the effect of interpersonal touch, perceived employee responsibility, and an additional manipulated variable, failure severity, with the mediating effects of perceived interactional justice, mood states, and consumer involvement on recovery satisfaction, revisit intention and an additional dependent variable of word of mouth. Participants are randomly assigned to one of the eight scenarios, two with varying levels of failure severity (low/high), two with varying presence of interpersonal touch (no touch/touch), and two with varying levels of perceived employee responsibility (see Table 5.1 for terms and notation).

Table 5.1 Factorial Design Terms and Notation

Failure severity – low (scenario 1,2,3,4)				
	2 x Interpersonal Touch			
2 x	No touch/ Touch/			
Perceived Employee	Not Responsible	Not Responsible		
Responsibility	(Scenario 1)	(Scenario 2)		
	No Touch/	Touch/		
	Responsible	Responsible		
	(Scenario 3)	(Scenario 4)		
Failure severity – high (scenario 5,6,7,8)				
Failui	re severity – mgn (scenario 5,	6,7,8)		
Fanu	2 x Interpersonal Touch	0,7,8)		
2 x		Touch/		
	2 x Interpersonal Touch			
2 x	2 x Interpersonal Touch No touch/	Touch/		
2 x Perceived Employee	2 x Interpersonal Touch No touch/ Not Responsible	Touch/ Not Responsible		
2 x Perceived Employee	2 x Interpersonal Touch No touch/ Not Responsible (Scenario 5)	Touch/ Not Responsible (Scenario 6)		
2 x Perceived Employee	2 x Interpersonal Touch No touch/ Not Responsible (Scenario 5) No Touch/	Touch/ Not Responsible (Scenario 6) Touch/		

5.3.1 Research Justification

Followed the method used in Chapter 4, this study uses the same between-subject factorial experimental design with written scenarios. This study assesses two different contexts: an airline meal order service (Study 3A) and a domestic plumbing service (Study 3B).

Type of touch

Henley (1977) claims that touch communicates status and dominance wherein people of higher status touch those of lower status, for instance, a touch on the forearm (Study 1) and a pat on the shoulder (Study 2). During a negative service encounter when a consumer experiences a complication with the service, and in the midst of recovering the service, a fleeting touch on the arm may promote closeness and foster the consumer-employee relationship, or it may instead exacerbate the negative experience. In this chapter, study 3A (airline meals service) uses a fleeting touch (and no touch) during the conversation as one of the manipulated items in the

experiment when passengers do not receive what they ordered, and, study 3B (plumbing service) also uses a fleeting touch (and no touch) during the conversation as one of the manipulated items in the experiment when the plumber attempts to recover the plumbing problem.

Service Context

Study 3A examines an airline meal order service. Airlines often require their passengers to pre-order their meal to better manage resources and reduce wastage. Passengers who take the time and effort to go online to pre-book their meal have a particular vision of what kind of flying experience they wish to have. Further, some passengers may place their meal order online due to specific dietary requirements.

Study 3B utilises a domestic plumbing service, with a scenario in which a home maker requires a professional plumbing service to handle a blockage of the kitchen sink. The initial problem has been solved, but service failure occurs when an additional problem is identified. In these scenarios, they are clearly carved out the requirement of failure severity and employee responsibility for further examination.

5.3.2 Experimental Manipulation and Scenario Development

Study 3A and 3B use a 2 (interpersonal touch: no touch/touch) x 2 (perceived employee responsibility: not responsible/responsible) x 2 (failure severity: low/high) experimental between-subject factorial design with written scenarios. There are eight cells manipulating interpersonal touch, perceived employee responsibility, and failure severity. Given that Study 1 investigated the service context of a courier service and Study 2 investigated the service context of a full-service restaurant, Study 3 investigates the service context of an airline meal order service (3A) and domestic plumbing service (3B). The scenarios need to (a) describe a service failure

and recovery; (b) illustrate the failure severity; (c) illustrate the employee's responsibility for the negative encounter; and (d) illustrate physical touch. A second-person narrative is used for better affective-emotional involvement, greater clarity, ensure relevance, and to reduce gender bias.

Study 3A – airline meal order

The scenario begins as follows:

Imagine you are travelling on a flight when a hot meal is served.

When the flight attendant distributes the meal which you had ordered online, you find that the food is not what you ordered.

Following this introduction, each of the manipulations then outline the service encounter experienced by the participant (see the next section for further details about the manipulations). This study investigates the effects of the manipulated factors. As the gender of the frontline employee is not tested in this study, the frontline employee is worded as a 'flight attendant' which is a gender-neutral term. Interpersonal touch and perceived employee responsibility are manipulated by varying presence (no/yes) and failure severity is manipulated by varying level (low/high). When these manipulations are combined, the scenarios escalate from an experimental group that receives interpersonal touch, where the service employee is highly responsible for the negative service encounter, and failure severity is high enough for health implications; to a control group where there is no touch, the frontline employee is not responsible, and severity is low, involving only personal preference without further implications. The experimental manipulations for failure severity are as follows:

You pointed out to the flight attendant that you ordered the grilled chicken with rice, but instead you have been given the steamed chicken with rice (*failure severity: low*).

OR,

You pointed out to the flight attendant that you ordered the nut-free meal due to a life-threatening allergy you have, but you have been given the pasta pesto that is full of nuts. You would have severe health complications if you ate this meal due to your allergy to nuts (*failure severity: high*).

The experimental manipulations for perceived employee responsibility are as follows:

The flight attendance checks your order and reconfirms that you received the wrong meal because the online ordering system malfunctioned (perceived employee responsibility: not responsible).

OR,

The flight attendant checks your order and reconfirms that you received the wrong meal, as the meal is meant for another passenger (perceived employee responsibility: responsible).

The experimental manipulations for interpersonal touch are as follows:

They change the meal for you and apologies with a smile (*interpersonal touch*: *no touch*).

OR.

They change the meal for you and apologise with a smile and a fleeting touch on your arm (*interpersonal Touch: touch*).

The resulting scenarios are presented in full in Appendix F.

Study 3B – plumbing service

The scenario begins as follows:

You are at home when you discover a problem with the water supply.

You call a plumber to fix a blocked pipe. The plumber arrives and
after several attempts appears to solve the problem. Yet right after this
is problem solved,

Following this introduction, each of the manipulations then outlines the service encounter experienced by the participant (see the next section for further details about the manipulations). In keeping with the findings of Study 1 and 2 that interpersonal touch may have a negative effect on revisit intention with or without perceived employee responsibility, and that this negative effect can be even stronger when they are touched by a male service employee, this study only focuses on responses with male service employees. Interpersonal touch and perceived employee responsibility are manipulated by varying presence (no/yes) and failure severity is manipulated by varying level (low/high). When these manipulations are combined, the scenarios escalate from an experimental group that receives interpersonal touch, where the service employee is highly responsible for the negative service encounter, and failure severity is high enough for health implications; to a control group where there is no touch, the frontline employee is not responsible, and severity is low, involving only personal preference without further implications. The experimental manipulations for failure severity are as follows:

water in the kitchen sink overflows and wets the kitchen floor (*failure* severity: low).

OR,

water in the kitchen sink overflows, wets the kitchen floor, and a large area of adjoining dining room floor (*failure severity: high*).

The experimental manipulations for perceived employee responsibility are as follows:

Seeing this, the plumber quickly pulls the plug from the kitchen sink and turns off the water tap. He then cleans the kitchen floor, even though you were the one who blocked the sink with the sink plug (perceived employee responsibility: not responsible).

OR,

Seeing this, the plumber quickly pulls the plug from the kitchen sink and turns off the water tap. He then cleans the kitchen floor, as he accidentally pushed it down while repairing the water supply problem, which meant that the water was not drained (perceived employee responsibility: responsible).

The experimental manipulations for interpersonal touch are as follows:

He cleans everything for you with a smile (*interpersonal touch*: *no touch*).

OR,

He cleans everything for you and apologises to you with a smile and a fleeting touch on your arm (*interpersonal Touch: touch*).

The resulting scenarios are presented in full in Appendix G.

5.3.3 Sample

Studies 1 and 2 used samples from Australia. For Studies 3A and 3B, participants were recruited from Amazon MTurk. MTurk was one of the world-leading recruitment platforms for market surveys at the time of data collection. They have a global membership that allows data collection to occur cost-effectively and efficiently on a global scale. All participants are residing in America and aged above 18 years. This shows that the criteria are very large to represent America consumer populations who are ethically joining a survey with low or negligible risk.

Hyperlinks generated from the Key Survey online survey platform were sent to the MTurk administrator to further disseminate to its participants. Participants are randomly assigned to one of the eight scenarios without consideration of demographic information such as age, gender, or income group. These eight sets of questionnaires are randomly assigned to the participants from MTurk employees to improve the internal validity of the experiment (Zikmund, 2003).

The participants are given a participant information sheet and the statement of informed consent before they decide to continue with the survey. This allows participants to understand the purpose of the questionnaire and their right to withdraw their participation. As this questionnaire was kept anonymous to the research team, participants could not withdraw once they hit the submit button at the end of the questionnaire.

Participants are recruited using the convenience sampling method and randomly assigned to one of the eight sets of questionnaires. The target gender for this study is both male and female, focusing on general consumers residing in America. A summary of the population is outlined in Table 5.2.

Table 5.2 Summary of Population for both studies 3A and 3B

Particular	Study 3A	Study 3B
Total usable samples (n)	192	222
Age	18 and above	18 and above
Gender	Male/female	Male/female
Sample Type	Convenience	Convenience
Randomisation	True random	True random
Population source	MTurk online	MTurk online
Data collection duration	3 days	3 days
Date collection time-line	June 2018	June 2018

5.3.4 Instrument Development and Measurement

This study comprises two key components. The first component is the written scenario to illustrate negative service encounters and recovery. The second component is the questionnaire (including manipulation and realism checks to examine the credibility and realism of the assigned scenario), consisting of constructs related to recovery satisfaction, revisit intention, and word of mouth: (a) perceived interactional justice; (b) mood states; (c) consumer involvement; and (d) CT during service recovery. The survey instrument contains demographic information such as age, gender, religion, ethnic group, and their experience with negative service encounters.

The key difference between Study 3A and 3B is the service context and scenarios. Instruments and measurements used in both studies are identical, with the questions referring to the different service context. All measurements for the

constructs are operationalised by using a seven-point Likert scale (1=strongly disagree to 7= strongly agree) (Likert, 1967).

All collected data is processed using realism, manipulation, and confounding checks before further analysis. The scales used are the same as previous studies in Chapters 3 and 4. For realism and credibility checks, the scale adapted from McColl Kennedy, Daus and Sparks (2003) is used.

5.3.4.1 Measurement Scale for Manipulation Check

In this study, two levels of interpersonal touch, two levels of perceived employee responsibility, and two level of failure severity are manipulated using scenarios detailing a consumer experience within the stipulated service context.

Interpersonal touch is manipulated via the presence (or absence) of a fleeting touch, designed to suit both service contexts, whether as a passenger on a flight, or as a home maker dealing with the plumber. In the control group, where the employee did not touch the consumers, participants were anticipated to answer according to the scenario given.

5.3.4.2 Measurement Scale for Recovery Satisfaction

A good service recovery will increase recovery satisfaction (Bitner, 1990). Recovery satisfaction could potentially create a recovery paradox, whereby consumer attitudes and behavioural intention is more favourable after an effective service recovery (see Table 5.3). Unlike the scale in Chapter 4, this scale is adapted from Boshoff (2005), which is more comprehensive and better represents recovery satisfaction. It is adapted by a range of studies including Wang, Hsu & Chih (2014) for ordinary service recovery and Mattila, Cho & Heejung (2011) for service recovery derived from self-service technology.

Table 5.3 Measurement Scale for Recovery Satisfaction

Construct	Recovery satisfaction
Source	Adapted from Boshoff (2005)
Summated Scale	Seven-point Likert scale anchored at end-point (1= strongly disagree, 7= strongly agree)
Items	The employee I dealt with communicated clearly and provided feedback about my complaint.
	When I complained about poor service, the employee asked questions to help clarify the situation.
	The employee I dealt with was very understanding.
	The employee I dealt with was reliable.
	The employee I dealt with was honest in their endeavours to solve my problem.
	The employee I complained to first was able to solve my problem.
	The employee I complained to had to find someone else to solve my problem (<i>reverse coded</i>).
	My complaint was passed on from one employee to the next. (reverse coded)
	The airline apologised for the service failure that happened.
	The airline assured that they have what I want.
	The airline employees I dealt with were polite.
	The airline provided me with an explanation of why the problem had occurred.
	The airline employees I dealt with provided a satisfactory explanation of why the problem had occurred.
	The airline employees I dealt with worked in a tidy, professional environment.

5.3.4.3 Measurement Scale for Revisit Intention

The measurement scale for revisit intention is the same as in Chapters 3 and 4, adapted from Zeithaml, Berry, and Parasuraman (1996).

5.3.4.4 Measurement Scale for Word of Mouth

Word of mouth serves as an important source of reviews when consumers are contemplating future purchase intention. It is widely considered as critical

information that can have a significant impact on service providers' reputation. As word of mouth is strongly associated with recovery satisfaction (W. G. Kim, Ng, & Kim, 2009; Maxham, 2001), it is tested as a dependent variable together with recovery satisfaction and revisit intention, in addition to the interactive effect with other new variables in this study (see Table 5.4).

Table 5.4 Measurement Scale for Perceived Interactional Justice

Construct	Word of Mouth
Source	Adapted from Maxham (2001)
Summated Scale	Seven-point Likert scale anchored at end-point (1= strongly disagree, 7= strongly agree)
Items	How likely are you to spread positive word-of-mouth about this airline service?
	I would recommend this airline service to my friends.
Given my experience with this airline company, I would recommend their service to my friends. (reversed coded)	
	If my friends were looking for similar service, I would tell them to try other airlines.
	(reversed coded)

5.3.4.5 Measurement Scale for Perceived Interactional Justice

The measurement scale for perceived interactional justice is the same as in Chapter 3 and 4, which is adapted from Maxham (2001) and McColl-Kennedy and Sparks (2003).

5.3.4.6 Measurement Scale for Mood States

The measurement scale for mood states is the same as in Chapter 3, which is adapted from Schoefer & Ennew (2005).

5.3.4.7 Measurement Scale for Consumer Involvement

Along with perceived interactional justice and mood states, involvement is also tested at an individual level. The consumer involvement profile used in study 2

was widely used to test situational involvement (Laurent & Kapferer, 1985).

However, the consumer involvement scale used in this study is adapted from

Zaichkowsky's consumer involvement scale (1994) which is derived from the

widely-used personal involvement inventory scale (Zaichkowsky, 1985) (see Table

5.5).

Table 5.5 Measurement Scale for Consumer Involvement

Construct	Consumer Involvement
Source	Adapted from Zaichkowsky (1994)
Summated Scale	Seven-point Likert scale anchored at end-point (1= strongly disagree, 7= strongly agree)
Items	To me, this service is:
	1. Important
	2. Interesting
	3. Relevant
	4. Exciting
	5. Means a lot to me
	6. Appealing
	7. Fascinating
	8. Valuable
	9. Involving
	10. Needed

5.3.4.8 Measurement Scale for CT

The measurement scale for individual comfort level of interpersonal touch is the same as in Chapters 3 and 4, which is adapted from Webb & Peck (2015). Collected data is recoded into low and high CT groups using a median split (Iacobucci et al., 2015).

5.3.5 Ethical Clearance

The Queensland University of Technology Research Ethics Unit reviewed the application submitted online and granted ethics approval (approval code: 1700000378). Participants were offered help from QUT Research Ethics Office and QUT Careline if needed. America's lifeline phone number was stated in the participant information sheet prior to the core questionnaire as a form of distress and discomfort support.

5.3.6 Data Collection Procedure

Study 3 consists of two parts: (i) a recovery scenario and (ii) the questionnaire. After reading through the participant information sheet and giving consent, participants are directed to the first part of the study, namely the respective service recovery scenarios. Participants are randomly assigned to one of the eight manipulated scenarios, asked to read the scenario and to then answer the questionnaires. The final part of the questionnaire concerns demographic data, which is tested as a covariate in this study.

5.4 DATA ANALYSIS

Study 3 examines participant responses to the interaction effect of interpersonal touch, perceived employee responsibility, and failure severity during service recovery, with the mediating effect of perceived justice, mood states, and consumer involvement in order to elucidate the effects on recovery satisfaction, revisit intention, and word of mouth. Specifically, this section discusses the preliminary data preparation and sample characteristics for both study 3A and 3B (Section 5.3.1), reliability test for 3A (Section 5.3.2), manipulation checks for 3A (Section 5.3.3), realism check for 3A (Section 5.3.4), confounding test for 3A (Section 5.3.5), correlations test for 3A (Section 5.3.6), general linear model test for 3A (Section

5.3.7), hypotheses test for 3A(Section 5.3.8), and testing demographic variables as a covariate for 3A (Section 5.3.9). This analysis approach is repeated for study 3B in Sections 5.3.10 to 5.3.18.

5.4.1 Preliminary Data Preparation and Analysis

Prior to testing the hypotheses, the data requires preparation and several preliminary tests, including a reliability test, manipulation checks, and confounding test. This is followed by descriptive data analysis, including means, standard deviations, and correlations between the variables. The results of this preparation and analysis are outlined below:

5.4.1.1 Data Preparation

Similarly to Study 1 and 2, a between-subject factorial experimental design is used to conduct this study. Data collection is conducted online using the Key Survey online data collection system, which eliminates human interaction errors and missing data by stipulating that all questions must be answered, with the exception of demographic information, where participants are given choices with 'preferred not to answer'. The mean for each variable is computed for further analysis. Reverse coding is required for "I find myself pulling away if someone touches me". Age and religion are recoded into age groups and religion groups for ease of analysis. The relevant demographics of both Study 3A and 3B are presented in the next sub-section for comparative purposes.

5.4.1.2 Demographics of the Sample

A convenience sample of American participants is recruited via Amazon MTurk, the online marketing research agency. Participants are randomly assigned to one of eight cells, and the cell sizes are almost equal to 30.

The sample consists of 239 American adults. Outliers in the data (cases with values well above or well below the majority of other cases) are removed at the 5% trimmed mean, resulting in 192 usable cases for further analysis. The sample consists of 103 (53.6%) male and 88 (45.8%) female participants, and one participant preferred not to indicate their gender. Participants' ages are almost equally distributed between 20 and 82, with two choosing not to provide information about their age. More than half of the participants (n=103, 54.2%) are aged between 20 and 35, and the mean age of participants is 37.29 (SD=11.68). Based on the data, religion is grouped into Christianity, Agnostic atheism, and other faiths, with 39 participants choosing not to indicate their religion. Most of the participants did not identify themselves as having experienced a negative service encounter in the three months; however, this study still recruited 59 participants who had experienced a negative service encounter in the last three months (30.7%).

Study 3B- Domestic plumbing service

The sample consists of 241 American adults. Outliers in the data (cases with values well above or well below the majority of other cases) are removed at the 5% trimmed mean, resulting in 222 usable cases for further analysis. The sample consists of 122 (55%) male and 97 (43.7%) female participants, and three participants preferred not to indicate their gender. Participants' ages are almost equally distributed between 19 and 76, with nine choosing not to provide information about their age. More than one third of participants (n=92, 43.2%) are aged between 26 and 35, and the mean age of the participants is 36.15 (SD=10.95). Religion is grouped into Christianity, Agnostic atheism, and other faiths; this sample consists of well-distributed Christianity and agnostic atheism. There are also 39 participants who

chose not to indicate their religious affiliation. Most of the participants did not identify themselves as having experienced a negative service encounter in the last three months; however, this study still recruited 60 participants who had experienced a negative service encounter in the last three months (27%).

The sample characteristics of both samples reveal that the majority of participants display no bias against recent negative encounters that could affect their responses to the scenarios. Table 5.6 presents the key characteristic of both samples.

Table 5.6 Characteristic of samples for Study 3A and 3B

Items		Frequency 3A	Frequency 3B	
Total cases (n)		192	222	
Gender	Male	103	122	
	Female	88	97	
	Not answered	1	3	
Age	18 to 25	26	27	
	26 to 35	77	92	
	36 to 45	45	53	
	46 to 55	24	27	
	56 and above	18	14	
	Not answered	2	9	
Religion	Christianity	65	71	
	None/Agnostic atheism	78	75	
	Other faiths	10	13	
	Not answered	39	63	
Negative service	Yes	59	60	
experience	No	133	160	

The rest of the preliminary analysis and inferences analysis will be presented separately for Study 3A and Study 3B, respectively.

Study 3A – Inflight meal order service

5.4.2 Reliability Test and Internal Consistency for Study 3A

The values of Cronbach's coefficient alphas for the variables are all above 0.7, suggesting very good internal consistency and reliability (see Table 5.16). The output indicates recovery satisfaction (α =0.952), revisit intention (α =0.762), word of mouth (0.716), perceived interactional justice (α =0.918), consumer involvement (α =0.896), and CT (α =0.955) all have high coefficient alphas, representing high internal consistency.

The Kaiser-Meyer-Olkin (KMO) is used to measure sampling adequacy. Higher KMO values indicate a more acceptable value. The KMOs in this study are all acceptable (above 0.500) (Hair et al., 2010), and the Bartlett's Test of Sphericity values are significant (< 0.05). The output indicates KMO for recovery satisfaction (0.871), revisit intention (0.806), word of mouth (0.549), perceived interactional justice (0.914), consumer involvement (0.884), and CT (0.952) all have acceptable KMO values, thus indicating sampling adequacy. Positive mood, neutral mood, and negative mood are single item factors that do not require Cronbach's alpha or KMO. Table 5.7 illustrates the descriptive statistics and reliability tests for the variables.

Table 5.7 Descriptive Statistics and Reliability Test for Study 3A

	Mean	Standard Deviation	Cronbach's alpha	Kaiser- Meyer-Olkin (KMO)
Recovery satisfaction	5.71	0.74	0.952	0.871
Revisit intention	5.69	1.00	0.762	0.806
Word of Mouth	5.04	1.17	0.716	0.549
Perceived interactional	6.13	0.81	0.918	0.914
justice				
Positive mood	4.95	1.56	n/a	n/a
Neutral mood	4.26	1.54	n/a	n/a

Negative mood	2.77	1.70	n/a	n/a
Consumer involvement	4.81	4.82	0.896	0.884
CT	3.56	1.49	0.955	0.952

5.4.3 Manipulation Check for Study 3A

The first manipulation check question is: "In the scenario, the employee touched me". The no-touch scenario is assigned to 94 participants and 98 participants are assigned the touch scenario. A general linear model is used to run manipulation checks by testing the univariate between-subject effects, identifying a significant effect (M^2 =918.146, F(1,190) =418.617, p=0.000) for the manipulated no touch scenario (M=2.094, SD=0.153) and touch scenario (M=6.449, SD=0.150).

For the second manipulation check question: "I think the employee in the scenario is responsible for the problem", a general linear model test for univariate between-subject effects is run, revealing a significant effect (M²=140.061, F (1,190) =47.558, p=0.000) for the manipulated scenario in which the employee is perceived to not be responsible (M=2.420, SD=0.183) and responsible (M=4.135, SD=0.168).

A manipulation check is also run on failure severity using the question: "I think the severity of the service problem above is extremely major". A general linear model test for univariate between-subject effects is run, revealing a significant effect (M²=595.021, F (1,190) =284.845, p=0.000) for the manipulated low severity (M=2.010, SD=0.148) and high severity scenario (M=5.531, SD=0.148). The F values for interpersonal touch (418.617) and failure severity (284.845) are large, indicating that there is a high level of variability between the groups, which demonstrates that there is a sufficient level of manipulation distinguishing the scenarios in this experiment (Pallant, 2004). These results suggest that the

experimental manipulations work well, and participants understand the scenarios and questionnaire (see Table 5.8).

Table 5.8 Manipulation Checks: Between Subject Effects for Study 3A

Manipulated items	Manipulation check question	F	Sig.
Interpersonal touch	In the scenario, the employee	418.617	0.000
$\begin{array}{c} M_{\text{No touch}} = 2.074 \\ M_{\text{Touch}} = 6.449 \end{array}$	touched me.		
Perceived employee responsibility M Not responsible = 2.420 M Responsible = 4.135	I think the employee in the scenario is responsible for the problem.	47.558	0.000
Failure severity M low= 2.010 M High = 5.531	I think the severity of the service problem above is extremely major.	284.845	0.000

5.4.4 Realism Check for Study 3A

The realism and credibility of the scenarios is tested using a general linear model (GLM) to confirm that participants perceive the scenarios as being realistic. The mean scores for each of the eight scenarios suggest that participants agree that "A similar problem could occur to someone in real life" (realism check I), "The situation given in the scenario was realistic" (realism check II), and that "I think the employee in the scenario is similar to employees from another airline company I have seen before" (realism check III). No significant effects are observed in each of these checks. Therefore, the scenarios are deemed to be appropriate for this study (See Table 5.9).

Table 5.9 Realism Checks for Study 3A

	Realism	check I	Realism	check II	Realisn	n check III
Scenarios	Mean	Standard	Mean	Standard	Mean	Standard

		Deviation		Deviation		Deviation
Scenario 1	6.12	0.781	6.35	0.606	4.88	1.900
Scenario 2	6.33	0.816	6.37	0.875	5.25	1.391
Scenario 3	6.57	0.790	6.46	1.138	5.14	1.715
Scenario 4	6.18	1.249	6.29	0.810	4.93	1.654
Scenario 5	6.08	1.442	6.46	0.779	5.42	1.442
Scenario 6	6.43	0.843	6.43	0.728	5.35	1.641
Scenario 7	6.52	0.714	6.56	0.583	5.16	1.546
Scenario 8	6.17	0.937	6.17	0.984	5.22	1.380
GLM test:						
F value	0.904		0.489		0.310	
Sig.	0.505		0.842		0.949	

5.4.5 Confounding Test for Study 3A

The results indicate that there are no significant effects on all items, including the three realism checks and two other manipulated items. The three manipulated items were well controlled and no confounding effects on the other items. This further indicates that the data are suitable for further analysis (see Table 5.10).

Table 5.10 Summary of Confounding Check for Study 3A

Manipulated	Factors	Df	Df	F value	Sig.
item			error		
Interpersonal	Realism I	1	192	0.281	0.596
touch	Realism II	1	192	1.583	0.210
	Realism III		192	0.000	0.989
	Manipulated perceived	1	192	0.361	0.549
	employee responsibility				
	Manipulated failure severity		192	0.331	0.566
Perceived	Realism I	1	192	0.635	0.420
employee	Realism II	1	192	0.079	0.779
responsibility	Realism III		192	0.404	0.526
	Manipulated interpersonal	1	192	1.079	0.300
	touch				
	Manipulated failure severity		192	1.338	0.249
Failure	Realism I	1	192	0.000	1.000
severity	Realism II	1	192	0.067	0.797
	Realism III		192	0.768	0.382
	Manipulated interpersonal	1	192	0.125	0.724
	touch				
	Manipulated perceived	1	192	0.013	0.910
	employee responsibility				

5.4.6 Correlations Test for Study 3A

A Pearson correlations test is conducted to examine the strength and direction of the linear relationships between the variables. The results indicate that the majority of the variables are highly positively correlated to other variables (p-value less than 0.01), except neutral mood and negative mood (which are negatively correlated to other variables; p-value less than 0.05). The correlation coefficients are tabulated in Table 5.11.

Table 5.11 Correlation Coefficients between the Variables for Study 3A

	1	2	3	4	5	6	7	8
Recovery satisfaction (1)	-							
Revisit Intention (2)	0.578**	-						
Word of mouth (3)	0.434**	0.706**	-					
Perceived interactional justice (4)	0.771**	0.664**	0.498**	-				
Consumer involvement (5)	0.291**	0.338**	0.320**	0.334**	-			
Positive mood (6)	0.272**	0.353**	0.419**	0.340**	0.329**	-		
Neutral mood (7)	-0.159*	-0.050	-0.157*	-0.117	-0.181*	-0.085	-	
Negative mood (8)	-0.355**	-0.361**	-0.461**	-0.329**	-0.007	-0.544**	0.051	-

^{**}p<0.01, *p<0.05 (two-tailed)

5.4.7 Hypotheses Test for Study 3A

After preliminary data preparation, data reliability, and validity tests, the data is tested against the hypotheses. SPSS GLM, ANOVA, and MANOVA are used to assess the interaction effects and PROCESS macros are used to test the mediation

hypotheses in the regression analysis (Hayes, 2014). The hypotheses in this study are developed to investigate the interaction effects and mediating effects on (a) recovery satisfaction, (b) revisit intention, and (c) word of mouth in the given context. For reference, only the supported hypotheses are illustrated by the respective figures.

Hypothesis 1 posited that *interpersonal touch during service recovery has a* negative effect on (a) recovery satisfaction, (b) revisit intention, and (c) word of mouth. This hypothesis is tested using a general linear model, univariate betweengroup ANOVA, examining interpersonal touch as the independent variable, and recovery satisfaction, revisit intention, and word of mouth as dependent variables. The results show that interpersonal touch has no significant effect on all dependent variables. Therefore this hypothesis is not supported, as interpersonal touch alone has no significant effect on recovery satisfaction, revisit intention, or word of mouth.

However, interpersonal touch, perceived employee responsibility, and failure severity have an interaction effect on revisit intention, recovery satisfaction, and word of mouth. A multivariate analysis of variance (MANOVA) is used to test the between-subjects effects by testing the effect of the categorical independent variables to dependent variables. Table 5.12 illustrates the MANOVA test for the interaction effects between the various independent variables. Significant interaction effects are identified for recovery satisfaction (M^2 =2.576, F(1,192) =5.387, p =0.021), revisit intention (M^2 =4.071, F(1,192) =4.147, p =0.043), and word of mouth (M^2 =6.278, F(1,192) =4.738, p =0.031).

Table 5.12 MANOVA Test for Study 3A

Dependant	3 way interaction effects	Mean	F	Sig.
variable		square		
Recovery	Interpersonal touch	2.576	5.387	0.021
satisfaction	X			
Revisit intention	Perceived employee	4.071	4.147	0.043
	responsibility			
Word of mouth	X	6.278	4.738	0.031
	Failure severity			

Hypothesis 2 regarding employee gender is eliminated from this experiment as it is not included in this study framework.

Hypothesis 3 posited that *perceived employee responsibility has a negative effect on (a) recovery satisfaction, (b) revisit intention, and (c) word of mouth.* This hypothesis is tested using GLM, univariate between-group ANOVA, assessing perceived employee responsibility as the independent variable and recovery satisfaction, revisit intention, and word of mouth as the dependent variables. The results show that perceived employee responsibility has a significant negative effect on recovery satisfaction (M^2 =10.352, F (1,190) =20.393, p=0.000). The not responsible condition has higher recovery satisfaction ($M_{\text{Not responsible}}$ =5.967, SE=0.076) than the responsible condition ($M_{\text{Responsible}}$ = 5.501, SE=0.070). The results demonstrate a negative effect of perceived employee responsibility on recovery satisfaction. Hence, this hypothesis is supported (see Figure 5.2). The same test is also run on revisit intention and word of mouth, and no significant effects are identified.

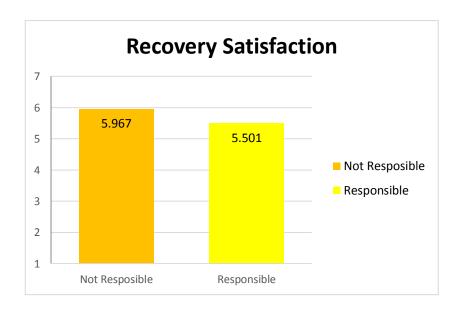


Figure 5.2 Effects of Perceived Employee Responsibility on Recovery Satisfaction

Hypothesis 4 posited that *perceived employee responsibility moderates the* relationship between interpersonal touch and (a) recovery satisfaction, (b) revisit intention, and (c) word of mouth. This hypothesis is tested using GLM, univariate between-groups ANOVA. The results reveal a significant two-way interaction effect for interpersonal touch and perceived employee responsibility on recovery satisfaction (M^2 =2.894, F (1,188) =5.819, p=0.017) (see Table 5.13 and Figure 5.3). However, there is no significant effect for revisit intention and word of mouth.

Table 5.13 Hypothesis 4 for Study 3A

Interpersonal	Perceived employee	Mean	Standard	95% confident	interval
touch	responsibility		error	Lower bound	Upper
					bound
No touch	Not responsible	5.807	0.110	5.589	6.024
	Responsible	5.596	0.097	5.405	5.787
Touch	Not responsible	6.106	0.103	5.903	6.309
	Responsible	5.402	0.099	5.207	5.597

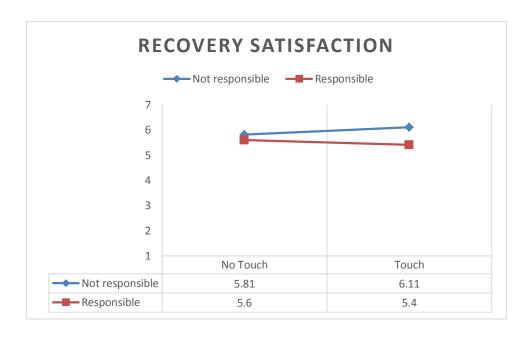


Figure 5.3: The Moderating Effects of Perceived Employee Responsibility on Recovery Satisfaction

Hypothesis 5 posited that *perceived interactional justice mediates the* relationship between (i) interpersonal touch, (ii) perceived employee responsibility, (iii) failure severity and (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth. This hypothesis uses PROCESS Macro model 4 to test interpersonal touch as the independent variable and perceived interactional justice as the mediator on the dependent variables. No significant effect is found for all three dependent variables. The same test is run using perceived employee responsibility as the independent variable, with results indicating a significant mediating effect (R^2 =0.65, R^2 =0.20, R^2 =0.20,

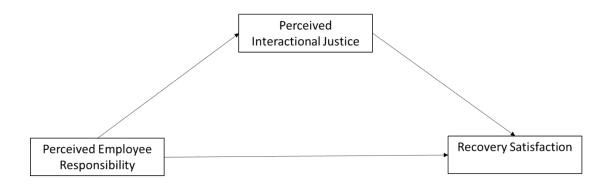


Figure 5.4: The Mediating Effects of Perceived Interactional Justice to Perceived Employee Responsibility on Recovery Satisfaction

In addition, the same test is run using failure severity as the independent variable, testing whether perceived interactional justice will mediate the relationship between failure severity on (a) recovery satisfaction, (b) revisit intention, and (c) word of mouth. The results show a significant mediating effect (R^2 =0.27, M^2 =1.01, F (2,189) =35.30, p=0.000, t = 7.63, LLCI = 0.51. ULCI = 0.87) on word of mouth (see Figure 5.5). No significant effects are identified for recovery satisfaction or revisit intention.

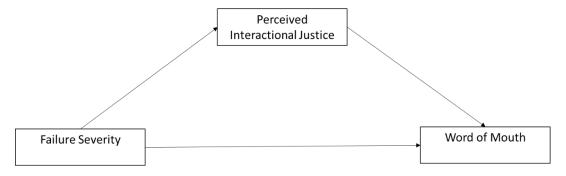


Figure 5.5: The Mediating Effects of Perceived Interactional Justice to Failure Severity on Word of Mouth

Hypothesis 6 posited that *mood states will mediate the negative effect of interpersonal touch during service recovery on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth.* This section tests the mediating effect of positive

mood, neutral mood, and negative mood states on the dependant variables. The results indicate that positive mood states mediate the relationship between perceived employee responsibility on recovery satisfaction (R^2 =0.17, M^2 = 0.47, F (2,189) = 19.42, p = 0.000, t = 4.09) (see Figure 5.6). However, no significant mediating effect is found for revisit intention or word of mouth.

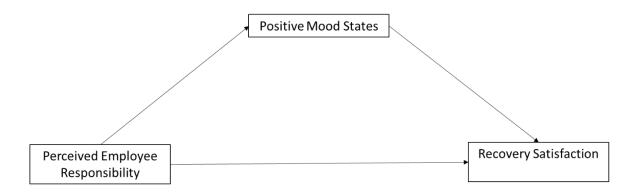


Figure 5.6: The Mediating Effects of Positive Mood States to Perceived Employee Responsibility on Recovery Satisfaction

The same model is also used to test neutral mood states. The results show that neutral mood states mediate the relationship between perceived employee responsibility on recovery satisfaction (R^2 =0.12, M^2 = 0.50, F (2,189) = 19.42, p = 0.030, t = -2.23) (see Figure 5.7). However, there is no significant mediating effect for revisit intention or word of mouth.

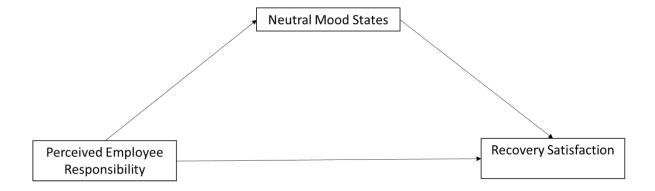


Figure 5.7: The Mediating Effects of Neutral Mood States to Perceived Employee Responsibility on Recovery Satisfaction

Subsequently, the same model is used to test negative mood states. The results show that negative mood states mediate the relationship between perceived employee responsibility on recovery satisfaction (R^2 =0.22, M^2 = 0.44, F (2,189) = 26.01, p = 0.000, t = -5.35, LLCI =-0.21, ULCI = -0.10) (see Figure 5.8). However, there is no significant mediating effect for revisit intention or word of mouth.

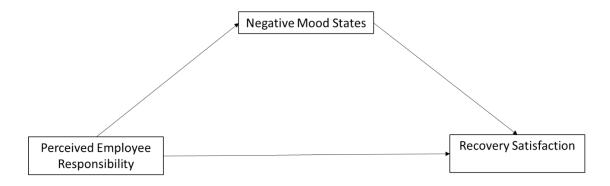


Figure 5.8: The Mediating Effects of Negative Mood States to Perceived Employee Responsibility on Recovery Satisfaction

Further, the same model is used to test the mediating effects of neutral mood states on the relationship between failure severity and the dependent variables. The results indicate that neutral mood states mediate the relationship between failure severity and word of mouth (R^2 =0.06, M^2 = 1.31, F (2,189) = 26.01, p = 0.02, t = -2.40, LLCI = -0.23, ULCI = -0.02) (see Figure 5.9). However, there is no significant mediating effect for recovery satisfaction or revisit intention. In addition, there is no significant mediating effect for negative mood states.

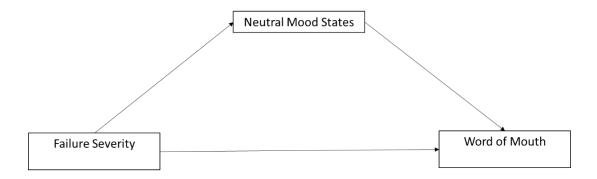


Figure 5.9: The Mediating Effects of Neutral Mood States to Failure Severity on Word of Mouth

Hypothesis 7 posited that *CT during service recovery has a positive effect on*(a) revisit intention, (b) recovery satisfaction, and (c) word of mouth. The results reveal that there is no significant effect for all dependent variables. Hence, this hypothesis is not supported.

Hypothesis 8 posited that *consumer involvement mediates the relationship* between (i) interpersonal touch, (ii) perceived employee responsibility, (iii) failure severity and (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth (see Figure 5.10). The results indicate that there is no significant effect between interpersonal touch and the three dependent variables. Further, the results indicate that consumer involvement mediates the relationship between perceived employee responsibility and recovery satisfaction ($R^2 = 0.17$, $M^2 = 0.47$, F(2,189) = 19.28, p = 0.000, t = 4.06, LLCI = 0.10, ULCI = 0.28). However, no significant mediating effect is identified for revisit intention or word of mouth.

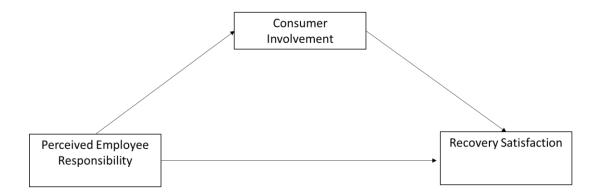


Figure 5.10: The Mediating Effects of Consumer Involvement to perceived Employee Responsibility on Recovery Satisfaction

The same model is used to test whether consumer involvement mediates the relationship between failure severity and recovery satisfaction, revisit intention, and word of mouth. A significant effect is identified for revisit intention ($R^2 = 0.14$, $M^2 = 0.88$, F (2,189) = 14.80, p = 0.000, t = 5.17, LLCI = 0.20, ULCI = 0.45) (see Figure 5.11).

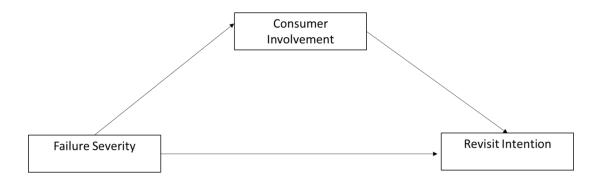


Figure 5.11: The Mediating Effects of Consumer Involvement to Failure Severity on Revisit Intention

A significant effect is also found for word of mouth (R^2 =0.14, M^2 = 1.19, F (2,189) = 15070, p = 0.000, t = 4.99, LLCI = 0.22, ULCI = 0.51) (see Figure 5.12). However, no significant mediating effect is identified for recovery satisfaction.

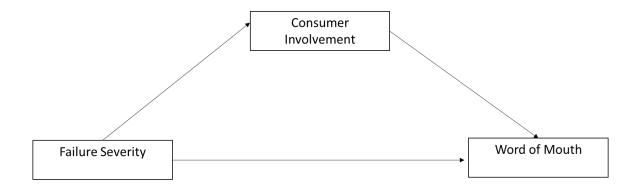


Figure 5.12: The Mediating Effects of Consumer Involvement to Failure Severity on Word of Mouth

Hypothesis 9 posited that *failure severity has a negative effect on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth.* This hypothesis is tested using GLM, univariate between-group ANOVA, assessing failure severity as the independent variable and recovery satisfaction, revisit intention, and word of mouth as the dependent variables. The results show that failure severity does not have a significant effect on recovery satisfaction and revisit intention, but does have a significant negative effect on word of mouth (M^2 =7.787, F (1,190) =5.816, p=0.017). The low severity condition has a higher effect on word of mouth (M_{Low} =5.240, SE=0.118) than the high severity condition (M_{High} = 4.837, SE=0.118). Hence, this hypothesis is supported (see Figure 5.13).

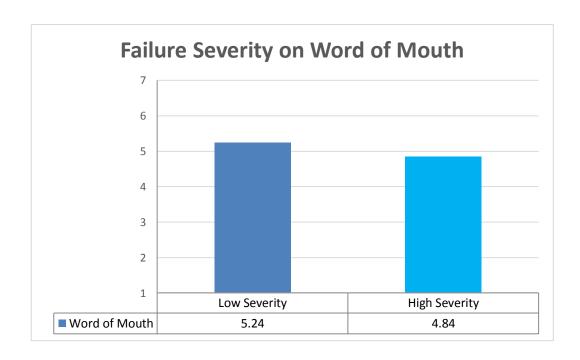


Figure 5.13 The Effects of Failure Severity on Word of Mouth

5.4.8 Comparing Demographic Groups for Study 3A

An independent sample T-test is used to compare the recovery satisfaction scores, revisit intention scores, and word of mouth scores for the respective demographic groups, including gender and experience of negative encounters in last three months.

5.4.8.1 Did Gender Matter?

The first analysis examines whether there is a significant difference between the two gender groups. An independent sample T-test is conducted to compare the recovery satisfaction mean scores for males (n=103) and females (n=88). The results reveal a significant difference for males (M=5.57, SD=0.73, SE=0.07) and females (M=5.87, SD=0.73, SE=0.07). Levene's test for equality of variances is 0.821, indicating that the variance for the two groups is the same (p> 0.05). Therefore, the data does not violate the assumption of equal variance. Therefore, there is a significant difference between gender groups (p=0.006) regarding recovery satisfaction.

The same procedure is conducted to compare the revisit intention scores for males (M=5.57, SD=0.96, SE=0.09) and females (M=5.86, SD=1.02, SE=0.10). Levene's test for equality of variance is 0.470 (p>0.05) and there is a significant difference between gender groups (p=0.042) regarding revisit intention.

Similarly, an independent T-test is repeated to compare the word of mouth mean scores for males (M=4.82, SD=1.10, SE=0.10) and females (M=5.30, SD=1.19, SE=0.12) identifying a significant difference between the groups (p=0.004). Levene's test for equality of variance is 0.175 (p>0.05) (see Table 5.14).

Table 5.14 Gender Group Differences Summary

Dependent	Mean	Standard	Standard	Levene's	Sig.
variable		Deviation	Error	test	
			Mean		
Recovery	Male= 5.57	0.735	0.072	0.821	0.006
satisfaction	Female= 5.87	0.738	0.078		
Revisit intention	Male= 5.56	0.962	0.094	0.470	0.042
	Female= 5.86	1.021	0.108		
Word of Mouth	Male= 4.82	1.103	0.108	0.175	0.004
	Female= 5.30	1.198	0.127		

5.4.8.2 Did Age Matter?

ANOVA is conducted to compare the mean scores of recovery satisfaction for the different age groups. Levene's test for equality of variance is 0.515, indicating that the variance for the groups is the same (p>0.05). However, there is no significant difference between age groups on recovery satisfaction (p=0.742). The same test is repeated for revisit intention, similarly finding no significant difference between age groups on revisit intention (p=0.725) and word of mouth (p=0.736). Both tests on the homogeneity of variances show that variance for the groups is the same (p>0.05).

5.4.8.3 Did Religion Matter?

ANOVA is conducted to compare the mean scores of recovery satisfaction for the different religious groups. Levene's test for equality of variance is 0.557, indicating that the variance for the groups is not the same (p>0.05). However, there is no significant difference between religion groups on recovery satisfaction (p=0.850), revisit intention (p=0.995), and word of mouth (p=0.859).

5.4.8.4 Did Recent Experience with a Negative Service Encounter Matter?

An independent T-test is conducted to compare the mean scores of recovery satisfaction, revisit intention, and word of mouth for the two groups who had either experienced or not experienced a negative service encounter in the last three months. Levene's test for equality of variance for recovery satisfaction, revisit intention, and word of mouth are all above 0.05, indicating that the variance for the groups is the same (p>0.05). However, there is no significant difference between the two groups who had experienced or not experienced a negative service encounter on recovery satisfaction (p=0.953), revisit intention (p=0.353), and word of mouth (p=0.938). To conclude, only gender demonstrates a significant difference between the groups regarding recovery satisfaction, revisit intention, and word of mouth.

Next sections reporting preliminary tests and inference analysis for Study 3B.

Study 3B – Domestic plumbing service

5.4.9 Reliability Test and Internal Consistency for Study 3B

The values of Cronbach's coefficient alphas for the variables are all above 0.7, indicating very good internal consistency and reliability (see Table 5.25). The output indicates recovery satisfaction (α =0.842), revisit intention (α =0.979), word of mouth (0.624), perceived interactional justice (α =0.940), consumer involvement (α =0.918),

and CT (α =0.957) all had adequate to high coefficient alphas, representing high internal consistency.

The KMOs in this study are all acceptable (above 0.500), and the Bartlett's Test of Sphericity values are significant (< 0.05). KMO values above 0.500 are considered acceptable (Hair et al., 2010). The output indicates KMO for recovery satisfaction (0.820), revisit intention (0.884), word of mouth (0.503), perceived interactional justice (0.935), consumer involvement (0.905) and CT (0.928) all have acceptable and high KMO values, demonstrating sampling adequacy for further analysis. Positive mood, neutral mood, and negative mood are single item factors that do not require Cronbach's alpha and KMO. Table 5.15 illustrates the descriptive statistics and reliability tests for the variables.

Table 5.15 Descriptive Statistics and Reliability Test for Study 3B

	Mean	Standard Deviation	Cronbach's alpha	Kaiser- Meyer-Olkin (KMO)
Recovery satisfaction	4.71	1.00	0.842	0.820
Revisit intention	5.24	1.48	0.979	0.884
Word of Mouth	4.73	1.33	0.624	0.503
Perceived interactional	5.63	1.10	0.940	0.935
justice				
Positive mood	5.05	1.59	-	-
Neutral mood	3.74	1.64	-	-
Negative mood	2.65	1.68	-	-
Consumer involvement	4.44	1.29	0.918	0.905
CT	3.59	1.38	0.957	0.928

5.4.10 Manipulation Checks for Study 3B

The first manipulation check question is: "In the scenario, the employee touched me". The no-touch scenario is extracted from 104 cases and 118 cases are extracted from the touch scenario. A GLM is used to run manipulation checks by

testing the univariate between-subject effects, revealing a significant effect $(M^2=566.567, F(1,220)=164.132, p=0.000)$ for the manipulated no touch (M=3.23, SD=2.406) and touch scenario (M=6.43, SD=1.18). The large F value of 164.132 indicates that the experiment is well manipulated, as participants are able to clearly distinguish the two level of interpersonal touch (and no touch).

For the second manipulation check question: "I think the employee in the scenario is responsible for the problem", a GLM test for univariate between-subject effects is run, revealing a significant effect (M²=55.568, F (1,220) =14.633, p=0.000) for the manipulated scenario in which the employee is perceived to not be responsible (M=2.81, SD=1.719) and responsible (M=3.82, SD=2.143).

A manipulation check is also run for failure severity using the question: "I think the severity of the service problem above is extremely major". A GLM test for univariate between-subject effects is run, revealing a significant effect (M²=9.592, F (1,220) =3.737, p=0.05) for the manipulated low severity (M=3.22, SD=1.553) and high severity scenario (M=3.63, SD=1.649). These results suggest that the experimental manipulations work well, and participants understand the scenarios and questionnaire (see Table 5.16).

Table 5.16 Manipulation Checks: Between Subject Effects for Study 3B

Manipulated items	Manipulation check question	F	Sig.
Interpersonal touch	In the scenario, the employee	164.132	0.00
$\begin{array}{c} M_{\text{No touch}} = 3.23 \\ M_{\text{Touch}} = 6.43 \end{array}$	touched me.		
Perceived employee responsibility M Not responsible = 2.81 M Responsible = 3.82	I think the employee in the scenario is responsible for the problem.	14.633	0.00
Failure severity M low= 3.22 M High = 3.63	I think the severity of the service problem above is extremely major.	3.737	0.05

5.4.11 Realism Check for Study 3B

The mean scores for each of the eight scenarios suggest that participants agreed that "A similar problem could occur to someone in real life" (realism check I), and "The situation given in the scenario was realistic" (realism check II). There are no significant effects for the two realism checks. Therefore, the scenarios are deemed to be appropriate for this study (See Table 5.17).

Table 5.17 Realism Checks for Study 3B

	Real	Realism check I		ism check II
Scenarios	Mean	Mean Standard		Standard
		Deviation		Deviation
Scenario 1	5.86	0.910	5.57	1.326
Scenario 2	5.97	1.033	5.73	1.413
Scenario 3	6.00	1.488	5.90	1.423
Scenario 4	5.70	1.466	5.50	1.526
Scenario 5	5.82	1.278	5.68	1.278
Scenario 6	5.69	1.228	5.79	1.177
Scenario 7	5.88	1.336	5.96	0.774
Scenario 8	6.10	1.113	6.00	1.414
GLM test:				
F value		0.382		0.516
Sig.		0.912	0.822	

5.4.12 Confounding Test for Study 3B

The results demonstrate that there is no significant effect on all items including the three realism checks and two other manipulated items. This indicates that the manipulated items are well controlled, with no confounding effects on the other items. Therefore, this further confirms that the data are suitable for further analysis (see Table 5.18).

Table 5.18 Summary of Confounding Check for Study 3B

Manipulated	Factors	Df	Df	F value	Sig.
item			error		
Interpersonal	Realism I	1	220	0.032	0.859
touch	Realism II	1	220	0.038	0.846

	Manipulated perceived employee responsibility	1	220	44.232	0.000
	Manipulated failure severity	1	220	0.016	0.900
Perceived	Realism I	1	220	0.275	0.600
employee	Realism II	1	220	0.545	0.461
responsibility	Manipulated interpersonal	1	220	11.443	0.001
	touch				
	Manipulated failure severity	1	220	0.231	0.631
Failure	Realism I	1	220	0.002	0.968
severity	Realism II	1	220	0.999	0.319
	Manipulated interpersonal	1	220	8.927	0.003
	touch				
	Manipulated perceived	1	220	0.036	0.850
	employee responsibility				

5.4.13 Correlations Test for Study 3B

A Pearson correlations test is conducted to examine the strength and direction of the linear relationships between the variables. The results indicate that the majority of the variables are highly positively correlated to other variables, as the p-value is less than 0.01 (indicated as **), and significantly correlated to other variables, as the p-value is less than 0.05 (indicated as *), (see Table 5.19).

Table 5.19 Correlation Coefficients between the Variables for Study 3B

	1	2	3	4	5	6	7	8
Recovery	-							
satisfaction (1)								
Revisit Intention (2)	0.585**	-						
Word of mouth (3)	0.512**	0.682**	-					
Perceived interactional justice (4)	0.645**	0.750**	0.542**	-				
Consumer involvement (5)	0.532**	0.437**	0.392**	0.404**	-			
Positive mood (6)	0.444**	0.689**	0.492**	0.628**	0.429**	-		
Neutral mood (7)	-0.207**	-0.221**	-0.146*	-0.199**	-0.209**	-0.206**	-	
Negative mood (8)	-0.378**	-0.528**	-0.451**	-0.552**	-0.205**	-0.715**	0.166*	

^{**}p<0.01, *p<0.05 (two-tailed)

5.4.14 Hypotheses Test for Study 3B

The hypotheses in this study are developed to investigate the interaction effects and mediating effects on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth. For reference, only the supported hypotheses are illustrated by the respective figures.

Hypothesis 1 posited that *interpersonal touch during service recovery has a* negative effect on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth. This hypothesis is tested using between-groups one-way ANOVA, assessing interpersonal touch as the independent variable and recovery satisfaction, revisit intention, and word of mouth as the dependent variables. The results show that interpersonal touch positively influences revisit intention (M^2 =10.900, F (1,220) =5.049, p=0.026). The no touch condition (n=104) has lower revisit intention (M_{No} touch=5.00, SD=1.476, SE=0.144) than the touch condition (n=118) condition (M_{Touch} =5.45, SD=1.462, SE=0.134) (see Figure 5.14).

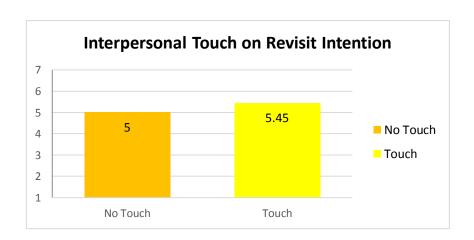


Figure 5.14: The Effects of Interpersonal Touch on Revisit Intention

Interpersonal touch has no significant effect on recovery satisfaction, and has a significant positive effect on word of mouth (M^2 =9.675, F (1,220) =5.500, p=0.020). The no touch condition has lower revisit intention ($M_{\text{No touch}}$ =4.50, SD=1.313,

SE=0.128) than the touch condition (M_{Touch} = 4.92, SD=1.337, SE=0.123) (see Figure 5.15).

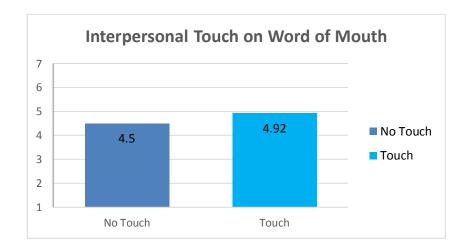


Figure 5.15: The Effects of Interpersonal Touch on Word of Mouth

Hypothesis 2 was omitted as employee gender was not employed in this study.

Hypothesis 3 posited that *perceived employee responsibility has a negative effect on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth.* This hypothesis is tested using GLM, univariate between-group ANOVA, revealing that perceived employee responsibility does not have a significant effect on revisit intention, recovery satisfaction, and word of mouth.

Hypothesis 4 posited that perceived employee responsibility moderates the relationship between interpersonal touch and (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth. The hypothesis is tested using SPSS PROCESS Macro template 1, assessing interpersonal touch as the independent variable and perceived employee responsibility as a mediator on the three dependent variables. The results for recovery satisfaction reveal that there is no significant moderating effect.

The same procedure is used to test revisit intention and word of mouth. A significant moderating effect is found when the employee is perceived to be responsible for the service recovery (p = 0.03, t = 2.13, LLCI=0.04, ULCI=1.13) on revisit intention (see Figure 5.16), but there is no significant moderating effect when the employee is perceived to not be responsible. Similarly for word of mouth, a significant moderating effect is found when the employee is perceived to be responsible for the service recovery (p = 0.01, t = 2.71, LLCI=0.18, ULCI=1.16) on word of mouth (see Figure 5.17), but there is no significant moderating effect when the employee is perceived to not be responsible.

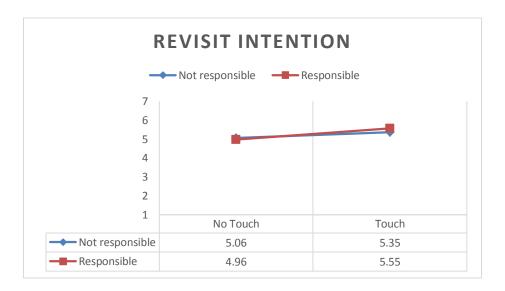


Figure 5.16: The Moderating Effects of Perceived Employee Responsibility on Revisit Intention

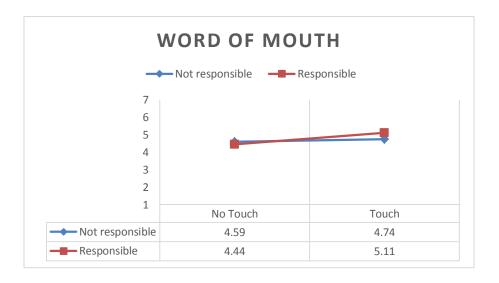


Figure 5.17: The Moderating Effects of Perceived Employee Responsibility on Word of Mouth

Hypothesis 5 posited that *perceived interactional justice mediates the* relationship between (i) interpersonal touch, (ii) perceived employee responsibility, (iii) failure severity and (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth. This hypothesis is tested using PROCESS Macro model 4 to examine interpersonal touch as the independent variable and perceived interactional justice as a mediator on the dependent variables. The results reveal no significant mediating effect on recovery satisfaction, revisit intention, and word of mouth (p>0.05), even though the results show a direct effect of perceived interactional justice on recovery satisfaction, revisit intention, and word of mouth.

The same test is also run on perceived interactional justice regarding perceived employee responsibility and failure severity, respectively. The results indicate that there is no significant mediating effect, as perceived interactional justice does not mediate the relationship between perceived employee responsibility, and failure severity and the dependent variables. Hence, this hypothesis is not supported.

Hypothesis 6 posited that *mood states will mediate the negative effect of interpersonal touch during service recovery on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth.* This section tests the mediating effect of positive mood, neutral mood, and negative mood states on the dependant variables. The mediating effect is tested regarding the relationship between interpersonal touch, perceived employee responsibility, and failure severity on recovery satisfaction, revisit intention, and word of mouth, respectively. The results show that neutral mood mediates the relationship of interpersonal touch on revisit intention ($R^2 = 0.06$, $M^2 = 2.08$, F(2,219) = 7.37, P = 0.000, P = 0.00

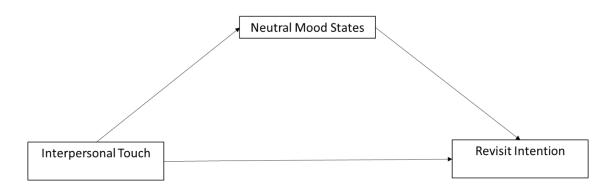


Figure 5.18: The Mediating Effects of Neutral Mood States to Interpersonal Touch on Revisit Intention

Further, neutral mood states mediate the relationship between interpersonal touch on word of mouth (R^2 =0.04, M^2 = 1.74, F (2,219) = 4.56, p = 0.010, t = -1.89, LLCI=0.00, ULCI=0.16) (see Figure 5.19).

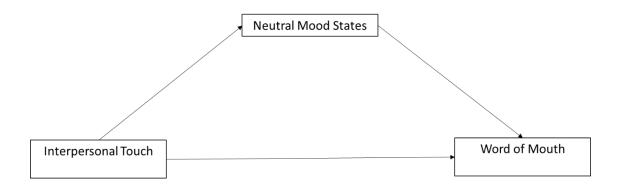


Figure 5.19: The Mediating Effects of Neutral Mood States to Interpersonal Touch on Word of Mouth

In Study 3B, positive mood and negative mood states are found to have no significant effect to mediate the relationship between interpersonal touch, perceived employee responsibility, and failure severity on recovery satisfaction, revisit intention, and word of mouth.

Hypothesis 7 posited that *CT during service recovery has a positive effect on* (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth. The results reveal significant effects (M^2 =18.450, F (1,220) = 8.684, p = 0.004, M_{CTLow} = 4.955. M_{CTHigh} = 5.531) on revisit intention, with significant effects for recovery satisfaction (M^2 =5.098, F (1,220) = 5.103, p = 0.025, M_{CTLow} = 4.562. M_{CTHigh} = 4.865) and word of mouth (M^2 =11.488, F (1,220) = 6.561, p = 0.011, M_{CTLow} = 4.504. M_{CTHigh} = 4.959). Hence, this hypothesis is supported.

Hypothesis 8 posited that *consumer involvement mediates the relationship* between (i) interpersonal touch, (ii) perceived employee responsibility, (iii) failure severity and (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth. The results reveal a significant effect of consumer involvement mediating the relationship between interpersonal touch on word of mouth ($R^2 = 0.17$, $M^2 = 1.51$, F (2,219) = 21.85, p = 0.000, t = 6.11, LLCI=0.00, ULCI=0.28) (see Figure 5.20).

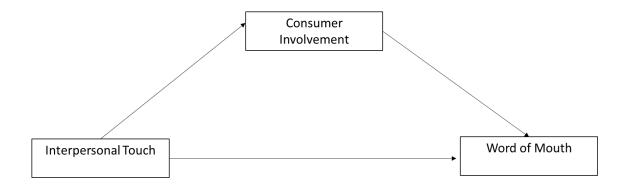


Figure 5.20: The Mediating Effects of Consumer Involvement to Interpersonal Touch on Word of Mouth

Consumer involvement is also tested for its possible mediating effect on perceived employee responsibility, but no significant effect is identified. Nevertheless, consumer involvement mediates the relationship between failure severity and recovery satisfaction (R^2 =0.29, M^2 = 0.73, F (2,219) = 44.28, p = 0.000, t = 9.07, LLCI= -0.29, ULCI= -0.01) (see Figure 5.21).

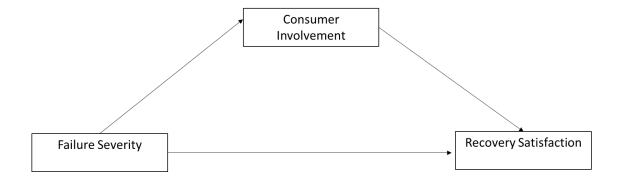


Figure 5.21: The Mediating Effects of Consumer Involvement to Failure Severity on Recovery Satisfaction

The same procedure is used to test revisit intention, revealing a significant mediating effect of consumer involvement regarding the relationship between failure severity on revisit intention (R^2 =0.19, M^2 = 1.79, F (2,219) = 26.00, p = 0.000, t = 7.07, LLCI= -0.34, ULCI= -0.01) (see Figure 5.22) and word of mouth (R^2 =0.16, M^2

= 1.52, F (2,219) = 20.62, p = 0.000, t = 6.13, LLCI= -0.29, ULCI= -0.01) (see Figure 5.23).

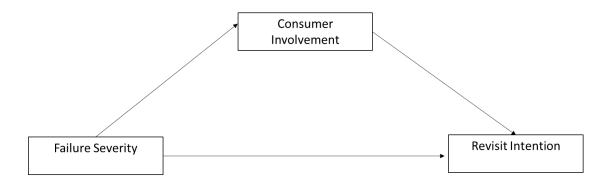


Figure 5.22: The Mediating Effects of Consumer Involvement to Failure Severity on Revisit Intention

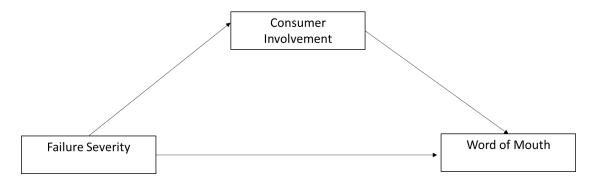


Figure 5.23: The Mediating Effects of Consumer Involvement to Failure Severity on Word of Mouth

Hypothesis 9 posited that *failure severity has a negative effect on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth.* This hypothesis is tested using general linear models, univariate between-group ANOVA to assess failure severity as the independent variable and revisit intention, recovery satisfaction, and word of mouth as the dependent variables. The results show that failure severity has a significant negative effect on recovery satisfaction (M^2 =4.592, F(1,220) =4.586, p=0.033). The low severity condition has higher recovery satisfaction (M_{Low} =4.85, SD=0.971, SE=0.092) than the high severity condition (M_{High} = 4.57, SD=1.028,

SE=0.097). Hence, this hypothesis is supported (see Figure 5.24). However, failure severity does not have a significant effect on revisit intention, and has a marginal negative significant effect (p=0.080) on word of mouth.

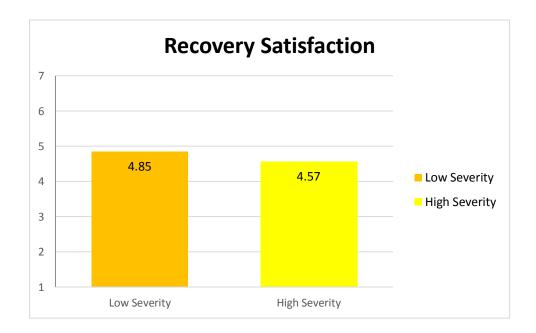


Figure 5.24: The Effects of Failure Severity on Recovery Satisfaction

5.4.15 Comparing Demographic Groups for Study 3B

One-way analysis of variance (ANOVA) is conducted to examine multiple demographic groups.

5.4.15.1 Did Gender Matter?

An independent sample T-test is conducted to compare the recovery satisfaction mean scores for males (n=122) and females (n=97). The results reveal that there is no significant difference in scores for males and females. Levene's test for equality of variances is 0.251, indicating that the variance for the two groups is the same (p> 0.05). Therefore, the data does not violate the assumption of equal variance.

The same procedure is conducted to compare revisit intention and word of mouth, similarly indicating that there is no significant difference between males and females. Although the results show that females have higher recovery satisfaction, revisit intention, and word of mouth as compared with males, the difference is not significant. Hence, study 3B demonstrates that gender has no effect on the experimental outcomes.

5.4.15.2 Did Age Matter?

ANOVA is conducted to compare the mean scores of recovery satisfaction for the different age groups. Levene's test for equality of variance is 0.197, indicating that the variance for the groups is the same (p>0.05). However, there is no significant difference between age groups on recovery satisfaction (p=0.934), revisit intention (p=0.697), and word of mouth (p=0.428). Therefore, age does not affect the experimental outcomes in this study.

5.4.15.3 Did Religion

ANOVA is conducted to compare the mean scores of recovery satisfaction for the different religious groups. Levene's test for equality of variance is 0.748, indicating that the variance for the groups is not the same (p>0.05). There is no significant difference between religion groups on recovery satisfaction (p=0.853), revisit intention (p=0.430), and word of mouth (p=0.090).

5.4.15.4 Did Recent Experience with a Negative Service Encounter Matter?

An independent T-test is conducted to compare the mean scores of recovery satisfaction, revisit intention, and word of mouth for the two groups who had either experienced (n=60) or not experienced (n=162) a negative service encounter in the

last three months. Levene's test for equality of variance for recovery satisfaction, revisit intention, and word of mouth are all above 0.05, indicating that the variance for the groups is the same (p>0.05). However, there is no significant difference between the two groups who had experienced or not experienced a negative service encounter on recovery satisfaction (p=0.119), revisit intention (p=0.927), and word of mouth (p=0.859). To conclude, differences in demographic characteristics (including gender, age group, religion, and whether the individual had experienced a negative service encounter in the last three months) have no effect on the experimental outcomes.

5.4.16 Testing CT as a covariate for Study 3B

In addition to the main experimental design in which participants are randomly assigned to scenarios where interpersonal touch, perceived employee responsibility, and failure severity are manipulated, this study also assesses participants' comfort level with interpersonal touch. Collected data is recoded into low and high CT groups with a median split (Iacobucci et al., 2015). ANOVA is conducted to compare the mean scores of recovery satisfaction, revisit intention, and word of mouth for the two CT groups. The results show that CT positively influences recovery satisfaction (M²=5.098, F (1,220)=5.103, p=0.025), with the low CT group (M=4.56, SD=1.04, SE=0.09) demonstrating a reduced influence compared to the high CT group (M=4.86, SD=0.95, SE=0.09).

Positive significant effects are found when comparing the revisit intention $(M^2=18.450, F(1,220)=8.684, p=0.004)$ scores for the low CT group (M=4.95, SD=1.62, SE=0.15) and the high CT group (M=5.53, SD=1.26, SE=0.12). The same ANOVA method is repeated to compare the word of mouth mean scores

 $(M^2=11.488, F (1,220) = 6.561, p=0.011)$ for the low CT group (M=4.50, SD=1.36, SE=0.12) and the high CT group (M=4.95, SD=1.28, SE=0.12) (see Table 5.20).

Table 5.20 CT Group Differences Summary

Dependent variable	Mean	Standard	Standard	Sig.
		Deviation	Error	
			Mean	
Recovery satisfaction	Low $CT = 4.56$	1.04	0.098	0.025
	High $CT = 4.86$	0.95	0.090	
Revisit intention	Low CT = 4.95	1.62	0.154	0.004
	High $CT = 5.53$	1.26	0.120	
Word of Mouth	Low $CT = 4.50$	1.36	0.129	0.011
	High $CT = 4.95$	1.28	0.121	

5.5 DISCUSSION

Previous literature has shown that failure severity during service recovery has a negative effect on recovery satisfaction, revisit intention, and word of mouth. However, failure severity alone is not sufficient to predict consumers' future intentions. There is a distinct lack of information regarding the joint effects of interpersonal touch with perceived employee responsibility during service recovery, in addition to the potential mediating effects of perceived interactional justice, mood states, and consumer involvement on outcomes such as recovery satisfaction, revisit intention, and word of mouth. Therefore, this study aims to examine the joint effects of interpersonal touch, perceived employee responsibility, and failure severity during a service recovery and how they relate to recovery satisfaction, revisit intention, and word of mouth. Furthermore, this study also aims to test the mediating effects of perceived interactional justice, mood states, and consumer involvement on the above-mentioned variables. To achieve this objective, scenarios are developed to clearly represent interpersonal touch and no touch, varying levels of frontline employee responsibility, and varying levels of failure severity.

As noted previously, this study aims to address the overarching research question:

How does interpersonal touch during service recovery influence consumer response to recovery satisfaction, revisit intention, and word of mouth?

To answer this overarching research question, this study investigates failure severity as an additional independent variable in order to assess its effects on recovery satisfaction, revisit intention, and word of mouth. Additionally, perceived interactional justice, mood states, and consumer involvement are tested a mediators between the manipulated variables and variable outcomes. Subsequently, the effect of demographic information on recovery satisfaction, revisit intention, and word of mouth are also tested. Finally, individual comfort level with interpersonal touch (CT) is tested. This study is significant because it builds on Study 1 and Study 2, contributing to the theoretical field of interpersonal touch, particularly regarding individual comfort level and attribution of blame. Further it also confirms the appropriateness of an interpersonal touch gesture to be used in a consumer market. The following sub-sections discuss the hypotheses in detail.

5.5.1 Testing the Main Effects

The first set of hypotheses aims to analyse the main effects of interpersonal touch, perceived employee responsibility, and failure severity on recovery satisfaction, revisit intention, and word of mouth. For Study 3A, interpersonal touch is found to have no significant effects on recovery satisfaction, revisit intention, and word of mouth. In Study 3B, interpersonal touch is found to have a positive effect on revisit intention and word of mouth. These results contradict the literature wherein consumers do not like to be touch during normal service encounters; however, these findings demonstrate that when consumers experience a negative service encounter,

interpersonal touch yields better revisit intention and positive word of mouth. This contributes to the theoretical framework of the recovery paradox when service recovery far beyond consumers' expectations results in consumers typically feeling more positive after experiencing a negative encounter than if the service failure had never occured (El-Manstrly et al., 2016).

In Study 3A, perceived employee responsibility has a significant negative effect on recovery satisfaction. However, no significant effect is found in Study 3B. The findings show that when frontline employees are perceived to be responsible for the negative service encounter, this is likely to reduce recovery satisfaction. Both findings support the theoretical framework of attribution of blame (Folkes, 1984); namely, that satisfaction is reduced when frontline employees are at fault and should take responsibility for the failure.

In Study 3A, failure severity has a significant negative effect on word of mouth, while in Study 3B, failure severity has a negative effect on recovery satisfaction. A service recovery involving a higher level of severity leads to lower recovery satisfaction resulting in dissatisfied consumers (Swanson and Kelley, 2001); this reduces positive word of mouth.

5.5.2 Testing the Moderating Effects of Employee Responsibility

Subsequent hypotheses aim to analyse the moderating effects of perceived employee responsibility regarding the relationship between interpersonal touch and recovery satisfaction, revisit intention, and word of mouth, respectively. Results from Study 3A indicate that when the frontline employee is perceived to not be responsible for the negative service encounter, perceived employee responsibility moderates the relationship between interpersonal touch on recovery satisfaction, whereby interpersonal touch leads to better recovery satisfaction. However, no

significant moderating effect is found when the frontline employee is responsible for the negative service encounter. This confirms that when the frontline employee is not at fault, consumers display higher recovery satisfaction that is enhanced when the frontline employee touches them. This finding supports the theoretical framework of Gallace and Spence (2010) regarding employee responsibility and interpersonal touch, wherein during a normal service encounter, interpersonal touch increases composure, trust, dominance, and affection, leading to higher recovery satisfaction.

5.5.3 Mediating Effects

The literature suggests that perceived interactional justice during service recovery influences recovery satisfaction, revisit intention, and word of mouth (Maxham III, 1999). In Study 3A, perceived interactional justice mediates the relationship between perceived employee responsibility on recovery satisfaction. Additionally, it also mediates the relationship between failure severity on word of mouth.

There is no previous literature examining whether perceived interactional justice mediates the relationship between interpersonal touch on recovery satisfaction, revisit intention, and word of mouth. In both study 3A and 3B, the mediating effects are not significant.

Mood states influence behavioural intention in a consumption setting (Swinyard, 1993, Puccinelli et al, 2007). In both Study 3A and 3B, mood states are categorised into positive, neutral, and negative mood states. In Study 3A, positive mood states mediate the relationship between perceived employee responsibility on recovery satisfaction, wherein consumers in a positive mood state mediate perceived employee responsibility, leading to better recovery satisfaction. However, when

consumers are not in a positive mood state, be it either a neutral mood or negative mood state, this negatively mediates the relationship between perceived employee responsibility on recovery satisfaction. This supported by prior literature (Schoefer and Diamantopoulus, 2008).

Additionally, neutral mood states also negatively mediate the relationship between failure severity on word of mouth, as consumers who are not in a positive mood are likely to conduct negative word of mouth. This is supported by the theory of gratification wherein when a consumer is in a positive mood, they are less inclined to conduct positive word of mouth; however when consumer is not in a positive mood, they are more likely to conduct negative word of mouth (Blodgett et al., 1993; Maxham, 2001).

Study 3B demonstrates that neutral mood states mediate the relationship between interpersonal touch on revisit intention and word of mouth. This contributes to the literature as no prior research has examined this relationship to date.

According to Schoefer and Ennew (2005), positive mood states do not have an effect on negative service encounters; however, consumers may exercise their justice judgement and also make negative evaluations (Forgas, 2004).

In both Study 3A and Study 3B, consumer involvement is tested for its mediating effects. The findings show that consumer involvement positively mediates the relationship between perceived employee responsibility on recovery satisfaction. Consumer involvement also positively mediates the relationship between failure severity on recovery satisfaction, revisit intention, and word of mouth. This supports prior literature whereby consumer involvement serves as a mediator for satisfaction (Gohary, Hamzelu, & Alizadeh, 2016).

Consumer involvement mediates the relationship between interpersonal touch on word of mouth. This contributes to the literature, as no prior research has examined this relationship. Since consumer involvement takes place at the individual level, similarly to interpersonal touch, consumer involvement influences consumer behavioural intention during service recovery (Wang et al., 2016).

5.5.4 The Effects of Covariance

In Study 3A, females display higher recovery satisfaction, revisit intention, and word of mouth as compared with male participants. However, no significant difference is found when participants are separated by age, religion, or whether they have experienced negative service encounters in the last three months.

In both studies, individual comfort level is tested as a covariate, revealing significant positive effects on recovery satisfaction and revisit intention. This means that consumers who individually feel more comfortable about being touched by a frontline employee are more likely to have a positive evaluation regarding satisfaction and future intention. This contributes to the literature, providing an empirical study of this CT measure (Webb & Peck, 2015), demonstrating that even during a negative service encounter, consumers who are more comfortable with interpersonal touch display higher satisfaction and are likely to return to the service provider in the future.

5.6 CONCLUSION

Study 3 aimed to examine: (1) failure severity as an additional independent variable; (2) word of mouth as an additional outcome variable; and (3) demographic information as covariance. The next chapter presents an overview of this thesis and



Chapter 6: Discussion and Conclusion

6.1 OVERALL RESEARCH PURPOSE

This research examines the process underlying the effects of interpersonal touch in the service recovery context and how responses from consumers to interpersonal touch affect revisit intention, recovery satisfaction, and word of mouth. Consumer behaviour literature on touch primarily focuses on product touch, neglecting interpersonal touch performed during a service recovery process.

The aim of this thesis was to empirically investigate the effect of interpersonal touch on revisit intention, recovery satisfaction, and word of mouth during service recovery. The previous five chapters introduced the research rationale and research questions (Chapter 1) and reviewed the relevant literature in addition to outlining and delineating the research focus of this thesis (Chapter 2). Chapter 3 presented Study 1, which tested the interaction effects of perceived interpersonal touch, perceived employee responsibility, and employee gender to revisit intention, and the potential mediators of perceived interactional justice and mood states. This study utilised a courier delivery service as the service context using a 'touch on the forearm'.

Chapter 4 presented Study 2, which examined the interaction effects of perceived employee responsibility, interpersonal touch, and CT to revisit intention and recovery satisfaction, and the potential mediators of perceived interactional justice and consumer involvement. This study tested the effects of male frontline employees in a full-service restaurant as the service context using a 'light pat on the shoulder'. Chapter 5 presented Study 3A (inflight meal order service) and Study 3B (domestic

plumbing service), investigating the interaction effects of perceived employee responsibility, interpersonal touch, and failure severity to revisit intention, recovery satisfaction, and word of mouth, and the potential mediators of perceived interactional justice, mood states, and consumer involvement. These studies tested the effects of gender-neutral frontline employees using a 'fleeting touch'.

An overarching research question was developed for this thesis, with three sub-research questions. Section 6.2 addresses each of these research questions and answers the overall research question. Next, the key contributions of this thesis to the theory (Section 6.3) and practice (Section 6.4) are discussed. Limitations and recommendations for future study are explored in Section 6.5. The chapter will then close with an overview of the findings and final conclusions of this thesis. (see Figure 6.1).

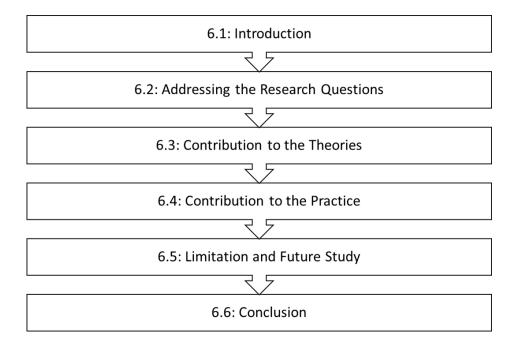


Figure 6.1: Outline of Chapter Six

6.2 ADDRESSING THE RESEARCH QUESTIONS

The interpersonal touch literature reveals primarily negative impacts of accidental interpersonal touch (Martin & Nuttall, 2017) that build on theoretical frameworks regarding why people typically avoid touch (Hall, 1996). Prior research has identified individual differences in comfort level with interpersonal touch (CT) (Webb & Peck, 2015), yet there is a dearth of knowledge about whether the positivity of intentional interpersonal touch is valid during a service recovery.

Recent literature on service recovery mostly focuses on recovery performance and recovery outcomes. Use of a business gesture such as a pat on the shoulder has not been empirically tested for its effect during service recovery. To address these gaps in the literature, research questions were developed to examine the overarching question: "To what extent do consumers respond to interpersonal touch during service recovery?" Overall, the purpose of this thesis was to investigate the effect of interpersonal touch during service recovery. Three between-subjects factorial experimental studies were designed to address the research question. All studies were carried out online using a video-based scenario in Study 1, and written-scenarios in Studies 2, 3A, and 3B, with respondents answering a seven-point Likert scale questionnaire in each study.

Study 1 primarily tested the effect of interpersonal touch, employee gender, and PER to revisit intention, and examined PIJ and mood states as mediators. Study 2 added CT and consumer involvement to revisit intention, and also tested its effect on recovery satisfaction. Study 2 did not achieve the desired results, and hence Study 3A and 3B added failure severity and word of mouth to the overall research model.

The three studies were designed to address the overarching research question: 'How do consumers respond to interpersonal touch during service recovery?' and aimed to answer three more specific research questions as listed in Table 6.1.

Table 6.1: List of Research Questions

RQ1	To what extent is the effect of interpersonal touch during a service recovery on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth?
RQ2	To what extent is the effect of interpersonal touch on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth affected by perceived employee responsibility?
RQ3	To what extent is the effect of interpersonal touch on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth affected by perceived interactional justice, mood states, and consumer involvement?

6.2.1.1 Answer to Research Question 1

The literature review in Chapter two resulted in RQ1, posited as:

To what extent is the effect of interpersonal touch during a service recovery on

(a) revisit intention, (b) recovery satisfaction, and (c) word of mouth?

Interpersonal touch has negative effects on revisit intention, recovery satisfaction, and word of mouth. Consumers do not like to be touched by a stranger, (namely, someone they do not have a close business relationship with) even though the touch could convey a subtle apology or bring comfort. Further, the negative effect of touch is exacerbated when it involves a male frontline employee.

Regardless of consumer gender, consumers demonstrate lower revisit intention when touched by a male employee. This supports prior research that neither gender likes to be touched by a man, even in a service recovery context (Dolinski, 2010). In Study

3B, interpersonal touch has a positive effect on revisit intention, recovery satisfaction, and word of mouth, contributing to the service paradox especially the plumbing and leakage issue was a major thing and it was eventually resolved by the service employee, a further satisfaction and positive outcomes occurs (El-Manstrly et al., 2016). Any consumer negativity can be overturned by the service paradox effect. A summary of the overall effects is presented in Table 6.2.

Table 6.2 Overall Effect Directions across all studies for Interpersonal Touch

	Study 1	Study 2	Study 3A	Study 3B
Revisit Intention	Negative	Negative	Negative	Positive
Recovery Satisfaction	n/a	Not sig. ²	Negative	Positive
Word of Mouth	n/a	n/a ¹	Negative	Positive

 $^{^{1}}$ n/a = not applicable, as the dependent variable was not tested

6.2.1.2 Answer to Research Question 2

RQ2 is posited as: "To what extent is the effect of interpersonal touch on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth affected by perceived employee responsibility?"

Prior to investigating the moderating effect, perceived employee responsibility was tested for its direct effects, resulting in both positive and negative effects. The lack of consistency is derived from contextual differences between the studies (Table 6.3). It brings positive effect when the courier man acknowledged the responsibility, due to perceived responsibility is essential in logistic service far more than in a dining experience.

² Not sig. = non significant effects found, p> 0.05

Table 6.3 Overall Effect Directions across all studies for Perceived Employee Responsibility

	Study 1	Study 2	Study 3A	Study 3B
Revisit	Positive	Negative	Not sig. ²	Not sig.
Intention				
Recovery Satisfaction	n/a	Negative	Negative	Not sig.
Word of Mouth	n/a	n/a¹	Not sig.	Not sig.

 $^{^{1}}$ n/a = not applicable, as the dependent variable was not tested

Furthermore, perceived employee responsibility was tested for its moderating effects. As touch was negative during service recovery in a courier service, PER has no positive effect on revisit intention. Similar results are observed for Study 3B, where PER positively moderates interpersonal touch on all outcomes due to the service paradox effect (see Table 6.4).

Table 6.4 Overall Effect Directions across all studies for moderating effects

	Study 1	Study 2	Study 3A	Study 3B
Revisit	Negative	Not sig. ²	Not sig.	Positive
Intention				
Recovery Satisfaction	n/a	Not sig.	Negative	Not sig.
Word of Mouth	n/a	n/a ¹	Not sig.	Positive

 $^{^{\}mathrm{I}}$ n/a = not applicable, as the dependent variable was not tested

6.2.1.3 Answer to Research Question 3

RQ3 is posited as: To what extent is the effect of interpersonal touch on (a) revisit intention, (b) recovery satisfaction, and (c) word of mouth affected by perceived interactional justice, mood states and consumer involvement?

² Not sig. = non-significant effects found, p > 0.05

² Not sig. = non significant effects found, p> 0.05

Study 1 addressed RQ3 by testing perceived interactional justice and mood states as mediators. Study 2 addressed RQ3 by testing perceived interactional justice and consumer involvement, and Study 3 addressed RQ3 by testing perceived interactional justice, mood states, and consumer involvement (see Table 6.5).

Table 6.5 Mediators tested in each study

	Perceived	Mood States	Consumer
	Interactional		Involvement
	Justice		
Revisit Intention	Study 1,2,3	Study 1,3	Study 2
Recovery	Study 1,2,3	Study 3	Study 2, 3
Satisfaction			
Word of Mouth	Study 1,2,3	Study 3	Study 2, 3

Study 1 revealed that perceived interactional justice positively mediates the relationship when the employee is perceived to be responsible during the service recovery, thus increasing consumers' revisit intention. Study 2 also found a positive mediating effect on revisit intention and recovery satisfaction. Results from Study 3A and Study 3B were not significant (see Table 6.6).

Table 6.6 Overall Effect Directions for Perceived Interactional Justice

	Study 1	Study 2	Study 3A	Study 3B
Revisit Intention	Positive	Positive	Not. Sig.	Not sig.
Recovery Satisfaction	n/a	Positive	Not. Sig.	Not sig.
Word of Mouth	n/a	n/a ¹	Not. Sig.	Not sig.

 $^{^{1}}$ n/a = not applicable, as the dependent variable was not tested

Mood states were categorised into positive, neutral, and negative mood states.

Overall, positive and neutral mood states have a positive effect on revisit intention and recovery satisfaction. However, neutral mood states have a negative effect on

² Not sig. = non significant effects found, p > 0.05

word of mouth. This is supported by the theory of gratification, as negative word of mouth is unlikely when consumers are in a positive mood state (see Table 6.7). Positive moods may also lead to mindlessness (Bless et al., 1996) or improve the chances of forgiveness.

Table 6.7 Overall Effect Directions across all studies for Mood States

	Study 1	Study 3A	Study 3B
Revisit Intention	Positive mood -	Not. Sig.	Neutral mood –
	positive		positive
Recovery	n/a	Positive mood -	Not sig.
Satisfaction		positive	
Word of Mouth	n/a	Not. Sig.	Neutral mood -
			negative

 $^{^{1}}$ n/a = not applicable, as the dependent variable was not tested

Regarding consumer involvement, results from Study 2 and Study 3A were not significant. Study 3B shows that consumer involvement positively mediates the effect of interpersonal touch on word of mouth.

6.3 CONTRIBUTION TO THEORY

Although interpersonal touch has been well researched in a range of academic disciplines including sociology, psychology, medicine, and marketing, findings regarding interpersonal touch within the literature are inconsistent. The purpose of this study was not only to re-examine interpersonal touch within the literature, but to also investigate its antecedent effects during service recovery. The results of this thesis have advanced several theoretical frameworks. Key contributions to the literature of touch and service recovery are discussed below.

6.3.1 Contribution to the Literature of Interpersonal Touch

Previous research reports that interpersonal touch is an important form of non-verbal communication in service marketing (Guenzi & Georges, 2010; Orth et al.,

² Not sig. = non significant effects found, p> 0.05

2013; Spence & Gallace, 2011). This research program investigated the antecedents of interpersonal touch, finding that in general it has a negative influence during service recovery.

Firstly, this research finds that interpersonal touch negatively influences recovery satisfaction, revisit intention, and word of mouth in the service recovery context in Study 1, 2 and 3A. Although prior research demonstrates a negative effect of accidental interpersonal touch (Martin, 2012), this is the first research to explore intentional interpersonal touch in the service recovery context. This thesis contributes to the theory of consumer contamination (Argo et al., 2006), which is underpinned by the law of contagion (Rozin et al., 1989). When a consumer become cognizant that the frontline employee has touched them, it becomes contagious and causes negative thoughts; namely touch is a negative contagion. This research finds strong evidence for the existence of touch contagion between frontline employee and consumer, as it induces feeling of disgust towards the contaminated situation. In turn, these feelings of disgust translate into negative evaluation regarding revisit intention, recovery satisfaction, and word of mouth.

Secondly, this thesis contributes to the comfort with interpersonal touch scale developed by Webb and Peck (2015), as this scale has not been empirically tested in the service recovery context. The results reveal that the CT scale works well in a service recovery context and in an interpersonal touch context. Consumers who are more comfortable with touch are more likely to feel comfortable from a frontline employee despite the service failure and recovery context. CT is also empirically tested in Study 2, identifying a significant contribution to the theoretical framework of CT (Webb & Peck, 2015). When consumers are not comfortable receiving interpersonal touch, touching them makes them feel less satisfied with the recovery

outcomes; however, no significant effect is found when consumers are comfortable with touch. Consumers with high CT feel good if they are highly involved in the service recovery and are touched. Findings from Study 2 also demonstrate that consumers who are highly involved in the service (a full-service restaurant) like to be touched during the service recovery process. These findings support the literature that high consumer involvement increases satisfaction (Puccinelli et al., 2009). Furthermore, these findings also compliment prior research showing that touch can increase involvement, and hence, increase persuasion that results in positive behavioural intention (Peck & Johnson, 2011). However, this is only observed for consumers who are individually more comfortable with touch.

Thirdly, this research reveals that in general consumers do not like to be touched during service recovery, especially by a male employee. This study also confirms that receiving touch from a female employee generates a more positive effect than a male employee, further supporting the findings of Levav & Argo (2010). Furthermore, a touch from a male employee is far more negative compared to a female employee. This finding supports previous studies that report that frontline employees are expected to provide exceptional service (Coelho et al., 2011), and to do anything to maintain the consumer-employee relationship.

6.3.2 Contribution to the Literature of Service Recovery

This research contributes to the literature of service recovery in several ways. Firstly, it makes a contribution to the attribution theory (Folkes, 1984). The results show that if the frontline service employee is not held responsible for the service recovery, this does not influence the consumer's evaluation of whether they would use the service again as no significant effect is found. However, if a consumer is touched by a frontline employee who is perceived to be responsible for the recovery,

the consumer is unlikely to use the service again. These results are in line with attribution theory (Folkes, 1984). This research also contributes to the theoretical framework of failure severity (Weun et al., 2004). Severity during service recovery changes the relationship between interpersonal touch from a frontline employee to word of mouth when the situation is less severe.

The results also contribute to several additional research frameworks.

Employee gender is found to have a very strong effect on revisit intention during service recovery, with consumers who are touched by a male employee indicating that they would not use the service again. This finding supports the literature wherein male employees are seen to be instrumental and assertive, and are typically perceived to be more empowered to handle the service encounter and potential service failure (McColl-Kennedy et al., 2003). Therefore, the expectation that male frontline employees should be able to handle the service failure may be the reason that consumers feel less satisfied during recovery, in line with disconfirmation theory (Oliver, 1980).

The findings also show that when consumers are in a neutral or negative mood state and are touched by an employee who is held responsible, consumers are less likely to revisit the service. Study 1 tested the individual difference of comfort of interpersonal touch scale as a covariate, finding that the effect of individual difference in CT has an effect on revisit intention during service recovery. This contributes to the theoretical framework of individual comfort level with interpersonal touch (Webb & Peck, 2015), representing the first examination of this construct in the service recovery context.

In contrast, if the employee touches the customer during service recovery is results in a negative mood state. Thus, it can be concluded that interpersonal touch

creates negative moods, and negative moods reduce revisit intention and reduces positive word of mouth. This further contributes to existing studies of interpersonal touch, identifying a prevalent negative effect on revisit intention (Hornik, Ofir, & Shaanan-satchi, 2010) during a service recovery with a courier company.

Consumer involvement positively mediates the relationship between interpersonal touch on word of mouth. This demonstrates that when consumers are highly involved in the service, they are likely to conduct positive word of mouth, such as recommending the service provider to their friends and family (Riaz & Khan, 2016). This finding complements the theory of service-dominant logic (Vargo & Lusch, 2014), whereby service recovery is also co-created with the consumer.

Additionally, when consumers are in neutral mood states (neither positive or negative) interpersonal touch leads to higher revisit intention and word of mouth. This contributes to the theoretical framework proposed by Swinyard (1993) that positive, neutral, and negative mood states can be aroused by negative service encounters. Building on the findings of Luis Abrantes et al. (2013) that mood states cause negative word of mouth, this study contributes to the research framework by identifying that neutral mood states can lead to positive word of mouth during a service recovery.

6.4 MANAGERIAL IMPLICATIONS

In addition to the above theoretical contributions, the findings of this thesis have a range of practical implications for marketing managers and service entrepreneurs. These implications cluster around the adequacy of service diagnostics, service provider training and recruitment, and consumer socialisation.

Primarily, the findings of this thesis demonstrate that consumers do not like to be touched. However, consumers do anticipate an improved commercialised consumer-employee relationship to increase their attitudinal future intention to revisit, satisfaction towards the service recovery, and a reason for them to further recommend this service provider to their peers (word of mouth). Hence, it is proposed that service providers may explore other ways to enhance the consumer-employee relationship, such as personalising the experience by calling the consumer by name or using information technology based applications to pre-record consumers' personal preferences.

Although marketers cannot control whether consumers have high or low CT, there are several approaches to reduce the negative influence of interpersonal touch. Firstly, consumers with a high comfort level of interpersonal touch are not influenced negatively by physical touch. If a frontline employee decides to employ touch, high CT consumers should be identified before the gesture takes place. For instance, it is recommended that an employee speaks in a friendly tone. It is also feasible to give a gesture similar to touch, but not touching the customer physically, to observe if the customer is comfortable with the gesture. However, as this thesis confirms that touch from male frontline service employees typically leads to a negative effect on revisit intention, male employees should be aware of their interpersonal proximity (the distance between the consumers and themselves) especially in service contexts where more conservative gestures should be considered. The use of facial expressions and a friendly tone of voice is recommended instead of interpersonal touch to deliver customer service when aiming to further foster customer-employee relationship. Male employees should not be discriminated against from a hiring perspective, but they should demonstrate caution when seeking to touch a consumer and maintaining

proximity allowance. It is interesting that in Study 3A (inflight meal service context), the overall mean score is higher compared to the other service contexts due to close proximity of employees and consumers (see Figure 6.1). In this context consumers possess higher acceptance of interpersonal touch due to the necessity of close proximity and the utilitarian nature of the service. Therefore, acceptance of interpersonal touch, and its effect on revisit intention, recovery satisfaction and word of mouth, is likely to vary in discrete service contexts.

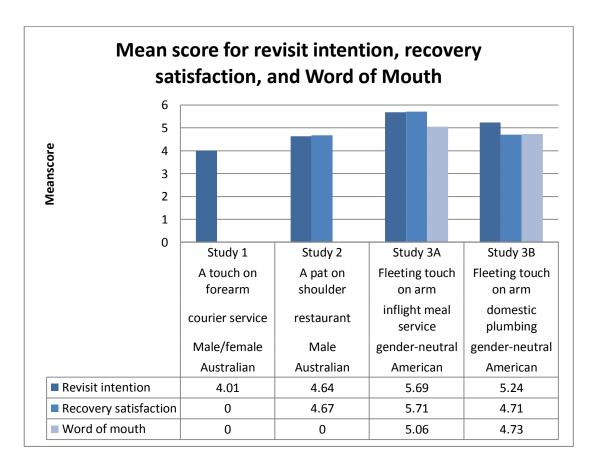


Figure 6.2: Mean Scores Comparison

The results show that consumers touched by frontline employees during service recovery are less likely to use the service again. This strong finding supports previous findings that consumers do not like to be touched by strangers (Martin, 2012). This is because touch is in general contagious, especially when there is no

prior relationship with the frontline employee. In Study 1, the frontline service employee is a courier delivery driver, who is a stranger to the consumers even though they are anticipating the employee's arrival. This thesis demonstrates that a touch on the forearm is not welcome by consumers in this scenario, therefore refuting the claims of Burgoon (1991) that this is effective as a caring and comforting gesture. The results of this study also contradict the findings of Rosenbaum et al. (2015) that a touch from a frontline employee fosters a better commercial friendship, as this study examines a higher end service context in which the consumer expects a level of personalised service and a positive interpersonal touch effect is possible when sufficient trust and the mandate of privacy invasion has already been granted by the consumer prior to the touch interaction. Frontline employees from less personalised services such as a grocery store, courier service, or plumbing service are advised to avoid the possibility of contagious touch with the consumer, as it is unlikely that any prior trust and rapport has been established between the employee and the consumer.

Frontline employees should be aware that a *fleeting touch on the arm* is the most acceptable type of touch, as compared to a touch on the forearm, followed by a pat on the shoulder. This is supported by the argument from Stier and Hall (1984) that a pat on the shoulder is commonly initiated from a higher status to lower status individual, whereby the fleeting touch is subtle and has a positive effect (Mok & Hansen, 1999). It is not hard to understand that consumers would like to be treated as higher status individuals in the service context, as they are the ones paying for the service. Managers are advised to train their frontline employees on how to conduct a fleeting touch when necessary.

The results also reveal that high consumer involvement leads to positive recovery satisfaction and revisit intention. Therefore, entrepreneurs may design their

service to include higher involvement elements in order to make consumers more excited about the service, the way service delivery to be more fascinating and interesting, and most importantly is to make consumer feel more involving (Zaichkowsky, 1994). A two-way customer service communication or suggestion channel should be properly managed so that it provides a trusted communication channel to promote higher involvement. In addition, maintaining interest and relevance should be a goal for service providers, such as developing interactive newsletters online, or running ground events to keep consumer feeling appealing and exciting about the service offered.

6.5 LIMITATIONS AND FUTURE STUDIES

As with most research, this research program, comprising three unique studies, is tempered by some limitations, primarily regarding time, resources, and funding as part of a PhD study. This section discusses the limitations of this research and discusses avenues for future study.

1. Different service context

It is recommended that future studies assess the research model in a service context with a consumer pool including consumers of high social status, such as jewellery design, interior design, or a high-end luxury fashion store. This research identifies that consumers do not like to be touched, perhaps based on the thinking that they should be highly respected during a service encounter and that a frontline service employee should not intrude on their personal space. This suggests that perceived social status may be a prevalent factor influencing interpersonal touch during service recovery. Future research should test perceived social status across different types of service to examine these issues more closely.

2. Extremely high involvement contexts

The level of consumer involvement mediating interpersonal touch in this research could also be tested further. Future studies could test service contexts with a higher level of involvement, such as a house renovation or a wedding planner, to test areas of extremely high involvement. In this context consumers may have less technical knowledge to participate in the service, and may be more inclined to leave it to the discretion of the service provider. In this context, a touch on the shoulder may induce feelings of nurturing, comfort, care, and trust.

3. Business context effects

As the service contexts tested in this research are business to consumer, it is worth deploying the same research model to test how a business owner responds to interpersonal touch, for instance, during event planning for a product launch. In general, during business service encounters, outcomes such as credentials to handle the project, timeline, costs, quality, and total output are the focus. Future studies shall explore on whether the interpersonal touch changes the purchase intention and customer loyalty when the frontline employee touches the decision maker.

4. More in-depth gender exploration

A discussion of gender comprises more than a simple distinction between men and women. There is extensive prior research regarding same-gender and opposite-gender influences on service recovery, satisfaction, and overall revisit intention. Future studies should include same-gender, opposite gender, and LGBT exploration for a more thorough assessment of the gender effects that influence interpersonal touch, as the behavioural studies are gradually extended beyond only male and female observation and experiments.

5. When touch is necessary

Interpersonal touch in this thesis refers to an additional gesture to increase consumer loyalty and foster a better commercial relationship with the consumer. Another interesting area of interpersonal touch involves touching a consumer when haptic already exists within the profession and they have a prior 'mandate to touch', such as a nurse, tailor, masseuse, or hairdresser, who all have a mandate to touch consumers more than their profession requires. If these frontline employees give consumers a pat on their shoulder during service recovery, will the result be the same? On the one hand, consumers could be familiar with their masseuse or nurse, where the professional service could be expected to cross proximity boundaries (Gleeson & Timmins, 2005). Similarly, if a sales associate touches a consumer while helping them to choose a better dress, they could have a mandate from the consumer to invade their privacy by touching their body. On the other hand, just because their work requires them to touch, this does not grant employees in these professions access to extend the touch to another part of the body, or to extend the duration of touch.

6.6 CONCLUSION

The purpose of this thesis was to investigate to what extent consumers respond to interpersonal touch during service recovery. This thesis has outlined the research aims, reviewed the research field, and identified key research gaps between two main bodies of literature; that is, interpersonal touch and service recovery. The overall methodology and research design were discussed, and the research justification and data analysis for Studies 1, 2, and 3 were reported. Finally, the research findings of

this thesis were discussed, along with the contributions to theoretical frameworks and							
practice, in addition to limitations and recommendations for future study.							

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Appendices

Appendix A: Study 1 Questionnaire



PARTICIPANT INFORMATION FOR QUT RESEARCH PROJECT

- Questionnaire -

The Effect of Touch on Revisit Intentions During Service Recovery

QUT Ethics Approval Number 1600000439

RESEARCH TEAM

Principal Wai Fan CHING, Ph.D. Student, Queensland University of Technology (QUT)

Researcher:

Associate Professor Brett MARTIN, Professor of Marketing

Researcher: Dr. Dominique GREER, Senior Lecturer

School of Advertising, Marketing and Public Relations, Queensland University of

Technology (QUT)

DESCRIPTION

This project is being undertaken as part of PhD study for Wai Fan CHING.

The purpose of this project is to find out whether the service employee should touch consumer during service recovery. This study also aims to understand consumers' revisit intention, and your preference to interpersonal physical touch.

You are invited to participate in this project because of a combination of the following reasons: (a) you are a consumer residing in Australia, whether temporarily or permanently; (b) you age is between 18 and 65 years old.

PARTICIPATION

Participation will involve watching a YouTube video, understand the scenario thoroughly and completing a set of questions on a scale from 1 (strongly disagree) to 7 (strongly agree), and choose to answer demographic information such as age, gender, household income and whether have you experienced negative service encounters in the past 3 months. It will take approximately 15 to 20 minutes of your time. Questionnaire will include questions such as:

- 1. I will probably use this service provide in the future. (strongly disagree strongly agree)
- The employee demonstrated understanding to handle the situation. (strongly disagree strongly agree)
- 3. In this scenario, I would have a negative mood. (strongly disagree strongly agree)
- 4. In this scenario, I am comfortable if the employee touches me on the arm when explaining something. (strongly disagree strongly agree)

Your participation in this project is entirely voluntary. If you agree to participate you have to complete ALL questions. Your decision to participate or not participate will in no way impact upon your current or future relationship with MyOpinions or QUT. If you do NOT agree to participate you can withdraw from the project during your participation without comment or penalty, any incomplete participation will be discarded and data will not be stored for further analysis. However as the questionnaire is anonymous once it has been submitted it will not be possible to withdraw.

There will be no right or wrong answers. The answers will be analysed at a group level, e.g. males /

Appendices 229

females; participation remains anonymous.

EXPECTED BENEFITS

It is expected that this project will not directly benefit you. However, it may provide insights and understanding for Australia marketers and business people to understand how to handle service recovery after a service failure occurs.

To recognise your contribution should you choose to participate, MyOpinions is offering you relevant incentives according to MyOpinions reward points system.

RISKS

Besides normal day-to-day living associated with your participation in this project, which you are required to spend approximately 15 to 20 minutes to participate, you could be feeling minor discomfort due to the video or the questions in the questionnaire; should assistance be needed, QUT provides for limited free psychology, family therapy or counselling services (face-to-face only) for research participants of QUT projects who may experience discomfort or distress as a result of their participation in the research. Should you wish to access this service please call the Clinic Receptionist on **07 3138 0999** (Monday–Friday only 9am–5pm), QUT Psychology and Counselling Clinic, 44 Musk Avenue, Kelvin Grove, and indicate that you are a research participant. Alternatively, Lifeline provides access to online, phone or face-to-face support, call **13 11 14** for 24 hour telephone crisis support.

PRIVACY AND CONFIDENTIALITY

All responses are anonymous and will be treated confidentially unless required by law. The names of individual persons are not required in any of the responses. This data may be used and analysed for the purpose of writing journal article, presenting at the conference and extend research study after completing my PhD.

Any data collected as part of this project will be stored securely as per QUT's Management of research data policy.

Please note that non-identifiable data collected in this project may be used as comparative data in future projects or stored on an open access database for secondary analysis.

CONSENT TO PARTICIPATE

Submitting the completed online questionnaire is accepted as an indication of your consent to participate in this project.

QUESTIONS / FURTHER INFORMATION ABOUT THE PROJECT

If you have any questions or require further information please contact one of the research team members below.

Wai Fan CHING, PhD candidate Professor Brett MARTIN, Professor of Marketing

Phone +61 7 3138 1407 Phone +61 7 3138 7739

Email waifan.ching@hdr.qut.edu.au Email brett.martin@qut.edu.au

Dr. Dominique Greer, Senior Lecturer (SFHEA)

Phone +61 7 3138 2987

Email dominique.greer@qut.edu.au

CONCERNS / COMPLAINTS REGARDING THE CONDUCT OF THE PROJECT

QUT is committed to research integrity and the ethical conduct of research projects. However, if you do have any concerns or complaints about the ethical conduct of the project you may contact the QUT Research Ethics Unit on +61 7 3138 5123 or email ethicscontact@qut.edu.au. The QUT Research Ethics Unit is not connected with the research project and can facilitate a resolution to your concern in an impartial manner.

Thank you for helping with this research project. Please keep this sheet for your information.

Please answer the following questions based on what you think. There are no right or wrong answers. You are required to answer all questions.

Section I: Service encounter experience scenario

INSTRUCTION: This section contains a service encounter scenario in a video clip. Please play the following video, understand the scenario thoroughly and then provide your evaluations of the episode. As you watch the video, please put yourself into the situation and imagine that you are experiencing the service.

video clip scenario

Based on the video scenario, please indicate the extent to which you agree with the following statements, on a scale from 1 (strongly disagree) to 7 (strongly agree):

	Strongly disagree					Strongly		
	aisag	ree					agree	
I think the employee in the scenario is responsible for the problem. (MPER)	1	2	3	4	5	6	7	
I think that a similar problem would occur to someone in real life. (MRC1)	1	2	3	4	5	6	7	
I think the situations given in the scenario are realistic. (MRC2)	1	2	3	4	5	6	7	
I think the employee in the scenario is attractive. (MATR)	1	2	3	4	5	6	7	
I think the employee in the scenario is likeable. (MLKE)	1	2	3	4	5	6	7	
I think the employee in the scenario is similar to employees from other courier service companies I have seen before. (MSML)	1	2	3	4	5	6	7	
In the scenario, the employee touched me. (MTCH)	1	2	3	4	5	6	7	
I would like to come back to this service provider in the future. (RCBK)	1	2	3	4	5	6	7	
I would engage this service provider in the future. (Spreng et al.)	1	2	3	4	5	6	7	
I will probably use this service provider in the future. (RUSE)	1	2	3	4	5	6	7	
I plan to come back to this service provider in the future. (RPCB)	1	2	3	4	5	6	7	

	Strongly disagree					Strongly agree	
In dealing with the problem, the employee treated me in a courteous manner. (JTCM)	1	2	3	4	5	6	7
During the effort to solve the problem, the employee seemed to care about me. (JCAR)	1	2	3	4	5	6	7
While attempting to solve the problem, the employee considered my view. (JCMV)	1	2	3	4	5	6	7
I think that I was well informed about the situation. (JWIS)	1	2	3	4	5	6	7
In this scenario, the employee:							
was friendly. (JFRD)	1	2	3	4	5	6	7
provided equal service to all customers. (JEQU)	1	2	3	4	5	6	7
demonstrated no bias towards me. (JDNB)	1	2	3	4	5	6	7
was attentive in providing good service.	1	2	3	4	5	6	7

Appendices 231

(JAGS)							
was sensitive to handling the situation. (JSHS)	1	2	3	4	5	6	7
demonstrated understanding to handle the situation. (JUHS)	1	2	3	4	5	6	7
In this scenario, I would have a:							
positive mood. (MSP)	1	2	3	4	5	6	7
negative mood. (MSNE)	1	2	3	4	5	6	7
neutral mood. (MSNA)	1	2	3	4	5	6	7
In this scenario, I would feel:							
Frustrated (MSFT)	1	2	3	4	5	6	7
Angry (MSAG)	1	2	3	4	5	6	7
Irritated (MSIR)	1	2	3	4	5	6	7
Unfulfilled (MSUF)	1	2	3	4	5	6	7
Discontented (MSDC)	1	2	3	4	5	6	7
Tense (MSTS)	1	2	3	4	5	6	7
Worried (MSWR)	1	2	3	4	5	6	7
Miserable (MSMR)	1	2	3	4	5	6	7

	Strongly disagree					Strongly agree	
In this scenario:							
I don't mind if the employee touches my arm. (TRAM)	1	2	3	4	5	6	7
I don't mind if the employee shakes hands with me. (TRSH)	1	2	3	4	5	6	7
I am comfortable if the employee touches me on the arm when explaining something. (TRAE)	1	2	3	4	5	6	7
I am comfortable if the employee shakes hands with me in greeting. (TRSG)	1	2	3	4	5	6	7
I will touch the employee on their arm to explain the situation. (TRIA)	1	2	3	4	5	6	7
I will shake hands with the employee before asking for an explanation. (Inagaki)	1	2	3	4	5	6	7
I will touch the employee on their arm when requesting explanation from them. (TRIE)	1	2	3	4	5	6	7
I will be pulling away if the employee touches me. (TRPA)	1	2	3	4	5	6	7

Section II: Personal Preference

INSTRUCTION: These questions are designed to learn a little more about you. There are no right or wrong answers and data will be analysed at a group level (e.g. males vs. females).

,	Strongly disagree					Strongly agree		
I often put my arm around people. (TAAP) initiate	1	2	3	4	5	6	7	
I consider myself to be a more 'touchy' person than most of my friends. (TMTP) initiate	1	2	3	4	5	6	7	
I feel more comfortable initiating touch than most people. (TCIT) initiate	1	2	3	4	5	6	7	
I feel more comfortable with touch than most people. (TMCP)	1	2	3	4	5	6	7	
When I greet someone, it often involves touch. (TIGT) initiate	1	2	3	4	5	6	7	
When talking to people, I often touch them on the arm. (TITA) initiate	1	2	3	4	5	6	7	
I can't help touching people when I am talking to them. (TCHT) initiate	1	2	3	4	5	6	7	
I am comfortable hugging other people. (TIHG) initiate	1	2	3	4	5	6	7	
When shaking someone's hand, I typically put my left hand on their upper arm. (TISA) initiate	1	2	3	4	5	6	7	
I don't mind if someone touches my arm. (TTMA) receiving	1	2	3	4	5	6	7	
When talking to someone, I don't mind if they touch me on the arm. (TTTA) receiving	1	2	3	4	5	6	7	
I am comfortable with people touching me. (TCOM) receiving	1	2	3	4	5	6	7	
During conversation, I don't mind if people touch me. (TCVT) receiving	1	2	3	4	5	6	7	
I am comfortable if a co-worker touches me on the arm when explaining something. (TCAE) receiving	1	2	3	4	5	6	7	
I find myself pulling away if someone touches me. (TPAW) receiving	1	2	3	4	5	6	7	
I typically don't mind receiving touch from another person. (TRTO) receiving	1	2	3	4	5	6	7	
I feel comfortable having a stranger touch me on the arm during conversation. (TSTC) receiving	1	2	3	4	5	6	7	
I am comfortable having someone touch me on the shoulder to get my attention. (TSGA) receiving	1	2	3	4	5	6	7	
I don't mind if someone places their hand on my upper back to guide me into a room. (THUB) receiving	1	2	3	4	5	6	7	

Demographic information

1.	Your gender: (GENDER)
	☐ Male
	☐ Female
	☐ Prefer not to answer

Appendices 233

☐ Prefer not to answer
Your total household income, before tax: (HHI)
☐ Less than \$52,000
□ \$52,000 to \$103,999
□ \$104,000 to \$155,999
□ \$156,000 to \$207,999
□ \$208,000 and above
☐ Prefer not to answer
Have you experienced negative service encounters in the past three months?
(EXP3)
□ Yes
□ No

Appendix B: Study 2 Questionnaire



PARTICIPANT INFORMATION FOR QUT RESEARCH PROJECT

- Questionnaire -

The Effect of Touch on Revisit Intentions During Service Recovery

QUT Ethics Approval Number 1700000378

RESEARCH TEAM

Principal Wai Fan CHING PhD Student

Researcher:

Associate Professor Brett MARTIN Principal Supervisor and

Researchers: Professor of Marketing

Dr. Dominique GREER Associate Supervisor and Senior

Lecturer

School of Advertising, Marketing and Public Relations, QUT

Business School

Queensland University of Technology (QUT)

DESCRIPTION

This project is being undertaken as part of a PhD study for Wai Fan CHING.

The purpose of this project is to find out whether the service employee should touch a consumer during service recovery. This study also aims to understand consumers' revisit intention and service recovery satisfaction, and the preference to interpersonal physical touch.

You are invited to participate in this project because of the following reasons: (a) you are a consumer residing in Australia, whether temporarily or permanently; (b) your age is above 18.

PARTICIPATION

Participation will involve reading written scenario, understanding the scenario thoroughly and completing a set of questions on a scale from 1 (strongly disagree) to 7 (strongly agree). In addition, you can choose to answer demographic information such as age, gender, household income and whether have you experienced negative service encounters in the past 3 months. It will take approximately 5 to 7 minutes of your time.

The questionnaire will include questions such as:

- 5. I will probably use this service provider in the future.
- 6. The employee demonstrated understanding to handle the situation.
- 7. I am comfortable if people touching me.
- 8. Dining in a restaurant reflects the sort of person I am.

Your participation in this project is entirely voluntary. If you agree to participate you

have to complete ALL questions. Your decision to participate or not participate will in no way impact upon your current or future relationship with Research Now or QUT. If you do NOT agree to participate you can withdraw from the project during your participation without comment or penalty. Any incomplete participation will be discarded and data will not be stored for further analysis. However as the questionnaire is anonymous once it has been submitted it will not be possible to withdraw.

There will be no right or wrong answers. The answers will be analysed at a group level, e.g. by gender. Your participation is anonymous.

EXPECTED BENEFITS

It is expected that this project will not directly benefit you. However, it may provide insights and understanding for Australian marketers and business people to understand how to handle service recovery after a service failure occurs, which may indirectly benefit you as a consumer by getting better service from service providers.

To recognise your contribution should you choose to participate, Research Now is offering you relevant incentives according to the Research Now reward points system.

RISKS

This project will take you about 5 to 7 minutes to complete. You may feel minor discomfort due to the written scenario or the questions in the questionnaire.

Should assistance be needed, QUT provides for limited free psychology, family therapy or counselling services (face-to-face only) for research participants of QUT projects who may experience discomfort or distress as a result of their participation in the research. Should you wish to access this service please call the Clinic Receptionist on **07 3138 0999** (Monday–Friday only 9am–5pm), QUT Psychology and Counselling Clinic, 44 Musk Avenue, Kelvin Grove, and indicate that you are a research participant. Alternatively, Lifeline provides access to online, phone or face-to-face support, call **13 11 14** for 24 hour telephone crisis support.

PRIVACY AND CONFIDENTIALITY

All responses are anonymous and will be treated confidentially unless required by law. The names of individual persons are not required in any of the responses. This data may be used and analysed for the purpose of writing journal articles, presenting at conferences and to extend the research study after completion of my PhD.

Any data collected as part of this project will be stored securely as per QUT's Management of research data policy. The research team members are the only persons who will have access to your responses.

Please note that non-identifiable data collected in this project may be used as comparative data in future projects or stored on an open access database for secondary analysis.

CONSENT TO PARTICIPATE

Submitting the completed online questionnaire is accepted as an indication of your consent to participate in this project.

QUESTIONS / FURTHER INFORMATION ABOUT THE PROJECT

If you have any questions or require further information please contact one of the researchers listed below.

Wai Fan CHINGwaifan.ching@hdr.qut.edu.au07 3138 6651Brett MARTINbrett.martin@qut.edu.au07 3138 7739Dominique Greerdominique.greer@qut.edu.au07 3138 2987

CONCERNS / COMPLAINTS REGARDING THE CONDUCT OF THE PROJECT

QUT is committed to research integrity and the ethical conduct of research projects. However, if you do have any concerns or complaints about the ethical conduct of the project you may contact the QUT Research Ethics Advisory Team on 07 3138 5123 or email ethicscontact@qut.edu.au. The QUT Research Ethics Advisory Team is not connected with the research project and can facilitate a resolution to your concern in an impartial manner.

Thank you for helping with this research project. Please print this sheet for your information.

Please answer the following questions based on what you think. There are no right or wrong answers. You are required to answer all questions.

Section I: Service encounter experience scenario

INSTRUCTION: This section contains a service encounter scenario in a written paragraph. Please read the following the scenario, understand the scenario thoroughly and then provide your evaluations of the episode. As you are reading, please put yourself into the situation and imagine that you are experiencing the service.

** written scenarios**

Based on the written scenario, please indicate the extent to which you agree with the following statements:

	Stron	gly				Strongly		
	Disag	gree					agree	
I think the employee in the scenario is	1	2	3	4	5	6	7	
responsible for the problem.	1	2	3	4	3	0	/	
I think that a similar problem would occur to someone in real life.	1	2	3	4	5	6	7	
I think the situations given in the scenario are realistic.	1	2	3	4	5	6	7	
In this scenario, the employee touched me.	1	2	3	4	5	6	7	
I am satisfied with the service provider's service.	1	2	3	4	5	6	7	
In my opinion, this service provider provides a satisfactory service.	1	2	3	4	5	6	7	
I would like to come back to this service provider in the future.	1	2	3	4	5	6	7	
I would engage this service provider in the future.	1	2	3	4	5	6	7	
I will probably use this service provider in the future.	1	2	3	4	5	6	7	
I plan to come back to this service provider in the future.	1	2	3	4	5	6	7	
	Stron	ngly				Str	ongly	
	disag	ree					agree	
In this scenario, the employee:								
was friendly.	1	2	3	4	5	6	7	
provided equal service to all customers.	1	2	3	4	5	6	7	
demonstrated no bias towards me.	1	2	3	4	5	6	7	
was attentive in providing good service.	1	2	3	4	5	6	7	

was sensitive to handling the situation.	1	2	3	4	5	6	7
demonstrated understanding to handle the	1	_	2	4			
situation.	1	2	3	4	5	6	7
In dealing with the problem, the employee		_	2	4			
treated me in a courteous manner.	1	2	3	4	5	6	7
During the effort to solve the problem, the		_	2	4			
employee seemed to care about me.	1	2	3	4	5	6	7
While attempting to solve the problem, the	1	2	3	4	5	6	7
employee considered my view.	1	2	3	7	3	U	,
I think that I was well-informed about the	1	2	3	4	5	6	7
situation.	1	2	3	4	3	O	,
Please indicate to what extent you felt this way of	luring t	his serv	rice enc	ounter:			
Joyful _positive_	1	2	3	4	5	6	7
Angry _negative_	1	2	3	4	5	6	7
Happy _positive_	1	2	3	4	5	6	7
In a bad moodnegative	1	2	3	4	5	6	7
Proud _positive_	1	2	3	4	5	6	7
Upset _negative_	1	2	3	4	5	6	7
Warm feeling _positive_	1	2	3	4	5	6	7
Sad _negative_	1	2	3	4	5	6	7
Being valued _positive_	1	2	3	4	5	6	7
Annoyed _negative_	1	2	3	4	5	6	7
It does not matter too much if I make a mistake	1	2	3	4	5	6	7
when I order food.							
It is very irritating to decide on a restaurant	1	2	3	4	5	6	7
and later discover it was not nice.							
Dining out is extremely important to me.	1	2	3	4	5	6	7
When I am searching for a restaurant, I always							
feel rather unsure about which restaurant to go	1	2	3	4	5	6	7
to.							
You can never be quite certain of your choice	1	2	3	4	5	6	7
of dining in a restaurant.							
Dining in a restaurant reflects the sort of	1	2	3	4	5	6	7
person I am.							-
I am very interested in dining in a restaurant.	1	2	3	4	5	6	7
Dining in a restaurant says something about	1	2	3	4	5	6	7
who you are.							
Whenever I dine in a restaurant, it is like	1	2	3	4	5	6	7

giving myself a reward.							
I really enjoy dining in a restaurant.	1	2	3	4	5	6	7
To me, dining in a restaurant is quite a	1	2	3	4	5	6	7
pleasure.							

Section II: Personal Preference

INSTRUCTION: These questions are designed to learn a little more about you. There are no right or wrong answers and data will be analysed at a group level (e.g. males vs. females).

	Stron	gly	-				ongly
	Disag	ree					Agree
I often put my arm around people.	1	2	3	4	5	6	7
I consider myself to be a more 'touchy' person than most of my friends.	1	2	3	4	5	6	7
I feel more comfortable initiating touch than most people.	1	2	3	4	5	6	7
I feel more comfortable with touch than most people.	1	2	3	4	5	6	7
When I greet someone, it often involves touch.	1	2	3	4	5	6	7
When talking to people, I often touch them on the arm.	1	2	3	4	5	6	7
I can't help touching people when I am talking to them.	1	2	3	4	5	6	7
I am comfortable hugging other people.	1	2	3	4	5	6	7
When shaking someone's hand, I typically put my left hand on their upper arm.	1	2	3	4	5	6	7
I don't mind if someone touches my arm.	1	2	3	4	5	6	7
When talking to someone, I don't mind if they touch me on the arm.	1	2	3	4	5	6	7
I am comfortable with people touching me.	1	2	3	4	5	6	7
During conversation, I don't mind if people touch me.	1	2	3	4	5	6	7
I am comfortable if a co-worker touches me on the arm when explaining something.	1	2	3	4	5	6	7
I find myself pulling away if someone touches me.	1	2	3	4	5	6	7

I typically don't mind receiving touch from another person.	1	2	3	4	5	6	7
I feel comfortable having a stranger touch me on the arm during conversation.	1	2	3	4	5	6	7
I am comfortable having someone touch me on the shoulder to get my attention.	1	2	3	4	5	6	7
I don't mind if someone places their hand on my upper back to guide me into a room.	1	2	3	4	5	6	7

Section III: Demographic Information 5. Your gender: ☐ Male ☐ Female ☐ Prefer not to answer 6. Your age: _____ years ☐ Prefer not to answer **age will then be recoded into age groups** 7. Your religion: _____ ☐ Prefer not to answer **religion will then be recoded into major religion groups** 8. Your ethnic group: _____ ☐ Prefer not to answer **Ethnic group will then be recoded into major ethnic groups** ***reason for not providing drop down menu is to avoid minority being neglected in questionnaire*** 9. Your total household income, before tax: ☐ Less than \$52,000 □ \$52,000 to \$103,999 □ \$104,000 to \$155,999 □ \$156,000 to \$207,999 \square \$208,000 and above ☐ Prefer not to answer 10. Have you experienced negative service encounters in the past three months? \square Yes □ No

Appendix C: Study 3A Questionnaire



PARTICIPANT INFORMATION FOR QUT RESEARCH PROJECT - Questionnaire -

The Effect of Touch on Revisit Intentions During Service Recovery

QUT Ethics Approval Number (17000378)

RESEARCH TEAM

Principal Wai Fan CHING PhD Student

Researcher:

Associate Professor Brett MARTIN Principal Supervisor and Professor of

Researchers: Marketing

Dr. Dominique GREER Associate Supervisor and Senior

Lecturer

School of Advertising, Marketing and Public Relations, QUT

Business School

Queensland University of Technology (QUT)

DESCRIPTION

This project is being undertaken as part of a PhD study for Wai Fan CHING.

The purpose of this project is to find out whether the frontline employee should touch a consumer during service recovery. This study also aims to understand consumers' revisit intention and service recovery satisfaction, and the preference to interpersonal physical touch.

You are invited to participate in this project because of the following reasons: (a) you are a consumer residing in the U.S., whether temporarily or permanently; (b) you are over 18 years old.

PARTICIPATION

Participation will involve reading written scenario, understanding the scenario thoroughly and completing a set of questions on a scale from 1 (strongly disagree) to 7 (strongly agree). In addition, you can choose to answer demographic information such as age, gender, household income and whether have you experienced negative service encounters in the past 3 months. It will take approximately 5 to 7 minutes of your time.

The questionnaire will include questions such as:

- 1. I will probably use this service provider in the future.
- 2. The employee demonstrated understanding to handle the situation.
- 3. I am comfortable if people touching me.

Your participation in this project is entirely voluntary. If you agree to participate you have

to complete ALL questions. Your decision to participate or not participate will in no way impact upon your current or future relationship with MTurk or QUT. If you do NOT agree to participate you can withdraw from the project during your participation without comment or penalty. Any incomplete participation will be discarded and data will not be stored for further analysis. However as the questionnaire is anonymous once it has been submitted it will not be possible to withdraw.

There will be no right or wrong answers. The answers will be analysed at a group level, e.g. by gender. Your participation is anonymous to QUT.

EXPECTED BENEFITS

It is expected that this project will not directly benefit you. However, it may provide insights and understanding for marketers and business people to understand how to handle service recovery after a service failure occurs, which may indirectly benefit you as a consumer by getting better service from service providers.

To recognize your contribution should you choose to participate, you will receive \$0.85 from Mturk for your successful and complete submission.

RISKS

This project will take approximately 5 to 7 minutes to complete. You may feel minor discomfort due to the written scenario or the questions in the questionnaire.

If you feel discomfort, please contact Lifeline, call 1-800-273-8255 for 24-hour telephone crisis support or chat online via the link: http://chat.suicidepreventionlifeline.org/GetHelp/LifelineChat.aspx.

PRIVACY AND CONFIDENTIALITY

All responses are anonymous and will be treated confidentially unless required by law. The names of individual persons are not required in any of the responses. This data may be used and analysed for the purpose of writing journal articles, presenting at conferences and to extend the research study after completion of my PhD.

Any data collected as part of this project will be stored securely as per QUT's Management of research data policy. The research team members are the only persons who will have access to your responses.

Please note that non-identifiable data collected in this project may be used as comparative data in future projects or stored on an open access database for secondary analysis.

CONSENT TO PARTICIPATE

Submitting the completed online questionnaire is accepted as an indication of your consent to participate in this project.

QUESTIONS / FURTHER INFORMATION ABOUT THE PROJECT

If you have any questions or require further information please contact one of the researchers listed below.

Wai Fan CHINGwaifan.ching@hdr.qut.edu.au+617 3138 6651Brett MARTINbrett.martin@qut.edu.au+617 3138 7739Dominique Greerdominique.greer@qut.edu.au+617 3138 2987

CONCERNS / COMPLAINTS REGARDING THE CONDUCT OF THE PROJECT

QUT is committed to research integrity and the ethical conduct of research projects. However, if you do have any concerns or complaints about the ethical conduct of the project you may contact the QUT Research Ethics Advisory Team on +617 3138 5123 or email humanethics@qut.edu.au. The QUT Research Ethics Advisory Team is not connected with the research project and can facilitate a resolution to your concern in an impartial manner.

Thank you for helping with this research project. Please print this sheet for your information.

STUDY 3A: QUESTIONNAIRE

Please answer the following questions based on what you think. There are no right or wrong answers. You are required to answer all questions.

Section I: Service encounter experience scenario

INSTRUCTION: This section contains a service encounter scenario in a written paragraph. Please read the following scenario, understand the scenario thoroughly and then provide your evaluations of the episode. As you are reading, please put yourself into the situation and imagine that you are experiencing the service.

** written scenario 8**

Imagine you are travelling on a flight when a hot meal is served. When the flight attendant distributes the meal which you had ordered online, you find that the food is not what you ordered. You point out to the flight attendant that you ordered the nutfree meal due to a life-threatening allergy you have, but you have been given the pasta pesto which is full of nuts. You would have severe health complications if you ate this meal due to your allergy to nuts.

The flight attendant checks your order and reconfirms that you received the wrong meal, as the meal is meant for another passenger. They change the meal for you and apologise with a smile and a fleeting touch on your arm.

Based on the written scenario, please indicate the extent to which you agree with the following statements: (added items are highlighted in yellow)

	Stron			Strongly agree			
Manipulation check							
I think the employee in the scenario is	1			4			7
responsible for the problem.	1	2	3	4	5	6	7
I think that a similar problem would occur to	1	2	3	4	5	6	7
someone in real life.	1	2	3	4	3	0	,
I think the situations given in the scenario are	1	2	3	4	5	6	7
realistic.		2		-			,
I think the employee in the scenario is similar							
to the employees from another airlines	1	2	3	4	5	6	7
company I had seen before.							
I think the severity of the service problem	1	2	3	4	5	6	7
above is extremely major.		2		-			,
In this scenario, the employee touched me.	1	2	3	4	5	6	7
Recovery satisfaction (Maxham, 2001)		I		I	I		
The employee I dealt with, communicated							
clearly and providing feedback about my	1	2	3	4	5	6	7
complaint.							
When I complained about poor service, the							
employee asks questions to help clarify the	1	2	3	4	5	6	7
situation.							
The employee I dealt with, were very	1	2	3	4	5	6	7
understanding.	1	2		-			,
The employee I dealt with, were reliable.	1	2	3	4	5	6	7
The employee I dealt with, were honest in their	1	2	3	4	5	6	7
endeavours to solve my problem.	1	2		-			,
The employee I complained to first was able to	1	2	3	4	5	6	7
solve my problem.	1	2		-			,
The employee I complained to had to find							
someone else to solve my problem. (reverse	1	2	3	4	5	6	7
coded)							
My complaint was passed on from one	1	2	3	4	5	6	7
employee to the next. (reverse coded)	1			_			'
The airline apologised for the service failure	1	2	3	4	5	6	7
that happened.	1			_			'
The airline assured me that they have what I	1	2	3	4	5	6	7

want.							
The airline employees I dealt with was polite.	1	2	3	4	5	6	7
The airline provided me with an explanation of why the problem had occurred.	1	2	3	4	5	6	7
The airline employee I dealt with provided a satisfactory explanation of why the problem had occurred.	1	2	3	4	5	6	7
The airline employees I dealt with worked in a tidy, professional environment.	1	2	3	4	5	6	7
Revisit intention (Zeithaml et al., 1996)		•					
I would like to come back to this service provider in the future.	1	2	3	4	5	6	7
I would engage this service provider in the future.	1	2	3	4	5	6	7
I will probably use this service provider in the future.	1	2	3	4	5	6	7
I plan to come back to this service provider in the future.	1	2	3	4	5	6	7
Word-of-mouth (Maxham, 2001)							
How likely are you to spread positive word-of-mouth about this airline service?	1	2	3	4	5	6	7
I would recommend this airline service to my friends.	1	2	3	4	5	6	7
Given my experience with this airline company, I would not recommend their service to my friends. (reversed coded)	1	2	3	4	5	6	7
If my friends were looking for similar service, I would tell them to try other airlines. (reversed coded)	1	2	3	4	5	6	7

	Stron	gly				Str	ongly
	disag	ree					agree
Perceived interactional justice (Maxham, 200	1; McC	oll-Ke	nnedy	& Spai	rks, 20	03)	
In this scenario, the employee:							
was friendly.	1	2	3	4	5	6	7
provided equal service to all customers.	1	2	3	4	5	6	7
demonstrated no bias towards me.	1	2	3	4	5	6	7
was attentive in providing good service.	1	2	3	4	5	6	7
was sensitive to handling the situation.	1	2	3	4	5	6	7
demonstrated understanding to handle the situation.	1	2	3	4	5	6	7
In dealing with the problem, the employee treated me in a courteous manner.	1	2	3	4	5	6	7
During the effort to solve the problem, the	1	2	3	4	5	6	7

employee seemed to care about me.							
While attempting to solve the problem, the	1	2	3	4	5	-	7
employee considered my point of view.	1	2	3	4	3	6	/
I think that I was well informed about the	1	2	3	4	5	6	7
situation.	1	2	3	4]	0	,
Mood states (Schoefer & Ennew, 2005)	•				•		
In this scenario, I would have a positive mood.	1	2	3	4	5	6	7
In this scenario, I would have a neutral mood.	1	2	3	4	5	6	7
In this scenario, I would have a negative mood.	1	2	3	4	5	6	7
Customer Involvement (Zaichkowsky (1994)							
To me, this airline inflight service is:	1	2	3	4	5	6	7
Important	1	2	3	4	5	6	7
Interesting	1	2	3	4	5	6	7
Relevant	1	2	3	4	5	6	7
Exciting	1	2	3	4	5	6	7
Means a lot to me	1	2	3	4	5	6	7
Appealing	1	2	3	4	5	6	7
Fascinating	1	2	3	4	5	6	7
Valuable	1	2	3	4	5	6	7
Involving	1	2	3	4	5	6	7
Needed	1	2	3	4	5	6	7

Section III: Personal Preference

INSTRUCTION: These questions are designed to learn a little more about you.

There are no right or wrong answers and data will be analysed at a group level (e.g. males vs. females).

	Strongly						Strongly		
	Disagree						Agree		
Individual differences in interpersonal touch	(Webb	& Pec	k, 2015	9)					
I often put my arm around people.	1	2	3	4	5	6	7		
I consider myself to be a more 'touchy' person than most of my friends.	1	2	3	4	5	6	7		
I feel more comfortable initiating touch than most people.	1	2	3	4	5	6	7		
I feel more comfortable with touch than most people.	1	2	3	4	5	6	7		
When I greet someone, it often involves touch.	1	2	3	4	5	6	7		
When talking to people, I often touch them on	1	2	3	4	5	6	7		

the arm.							
I can't help touching people when I am talking to them.	1	2	3	4	5	6	7
I am comfortable hugging other people.	1	2	3	4	5	6	7
When shaking someone's hand, I typically put my left hand on their upper arm.	1	2	3	4	5	6	7
I don't mind if someone touches my arm.	1	2	3	4	5	6	7
When talking to someone, I don't mind if they touch me on the arm.	1	2	3	4	5	6	7
I am comfortable with people touching me.	1	2	3	4	5	6	7
During conversation, I don't mind if people touch me.	1	2	3	4	5	6	7
I am comfortable if a co-worker touches me on the arm when explaining something.	1	2	3	4	5	6	7
I find myself pulling away if someone touches me. (reverse coded)	1	2	3	4	5	6	7
I typically don't mind receiving touch from another person.	1	2	3	4	5	6	7
I feel comfortable having a stranger touch me on the arm during conversation.	1	2	3	4	5	6	7
I am comfortable having someone touch me on the shoulder to get my attention.	1	2	3	4	5	6	7
I don't mind if someone places their hand on my upper back to guide me into a room.	1	2	3	4	5	6	7

Section III: Demographic Information 1. Your gender: Male Female Prefer not to answer 2. Your age: ______ years Prefer not to answer **age will then be recoded into age groups** 3. Your religion: ______ Prefer not to answer

4. Your ethnic group: _______
□ Prefer not to answer
Ethnic group will then be recoded into major ethnic groups
reason for not providing drop down menu is to avoid minority being neglected in questionnaire
5. Have you experienced negative service encounters in the past three months?
□ Yes
□ No

religion will then be recoded into major religion groups

Appendix D: Study 3B Questionnaire



PARTICIPANT INFORMATION FOR QUT RESEARCH PROJECT - Questionnaire -

The Effect of Touch on Revisit Intentions During Service Recovery

QUT Ethics Approval Number (17000378)

RESEARCH TEAM

Principal Researcher: Wai Fan CHING PhD Student

Associate Researchers: Professor Brett MARTIN Principal Supervisor and Professor of Marketing

Dr. Dominique GREER Associate Supervisor and Senior Lecturer

School of Advertising, Marketing and Public Relations, QUT Business School

Queensland University of Technology (QUT)

DESCRIPTION

This project is being undertaken as part of a PhD study for Wai Fan CHING.

The purpose of this project is to find out whether the frontline employee should touch a consumer during service recovery. This study also aims to understand consumers' revisit intention and service recovery satisfaction, and the preference to interpersonal physical touch.

You are invited to participate in this project because of the following reasons: (a) you are a consumer residing in the U.S., whether temporarily or permanently; (b) you are over 18 years old.

PARTICIPATION

Participation will involve reading written scenario, understanding the scenario thoroughly and completing a set of questions on a scale from 1 (strongly disagree) to 7 (strongly agree). In addition, you can choose to answer demographic information such as age, gender, household income and whether have you experienced negative service encounters in the past 3 months. It will take approximately 5 to 7 minutes of your time.

The questionnaire will include questions such as:

- 1. I will probably use this service provider in the future.
- 2. The employee demonstrated understanding to handle the situation.
- 3. I am comfortable if people touching me.

Your participation in this project is entirely voluntary. If you agree to participate you have to complete ALL questions. Your decision to participate or not participate will in no way impact upon your current or future relationship with MTurk or QUT. If you do NOT agree to participate you can withdraw from the project during your participation without comment or penalty. Any incomplete participation will be discarded and data will not be stored for further analysis. However as the questionnaire is anonymous once it has been submitted it will not be possible to withdraw.

There will be no right or wrong answers. The answers will be analysed at a group level, e.g. by gender. Your participation is anonymous to QUT.

EXPECTED BENEFITS

It is expected that this project will not directly benefit you. However, it may provide insights and understanding for marketers and business people to understand how to handle service recovery after a service failure occurs, which may indirectly benefit you as a consumer by getting better service from service providers.

To recognize your contribution should you choose to participate, you will receive \$0.85 from Mturk for your successful and complete submission.

RISKS

This project will take approximately 5 to 7 minutes to complete. You may feel minor discomfort due to the written scenario or the questions in the questionnaire.

If you feel discomfort, please contact Lifeline, call 1-800-273-8255 for 24-hour telephone crisis support or chat online via the link: http://chat.suicidepreventionlifeline.org/GetHelp/LifelineChat.aspx.

PRIVACY AND CONFIDENTIALITY

All responses are anonymous and will be treated confidentially unless required by law. The names of individual persons are not required in any of the responses. This data may be used and analysed for the purpose of writing journal articles, presenting at conferences and to extend the research study after completion of my PhD.

Any data collected as part of this project will be stored securely as per QUT's Management of research data policy. The research team members are the only persons who will have access to your responses.

Please note that non-identifiable data collected in this project may be used as comparative data in future projects or stored on an open access database for secondary analysis.

CONSENT TO PARTICIPATE

Submitting the completed online questionnaire is accepted as an indication of your consent to participate in this project.

QUESTIONS / FURTHER INFORMATION ABOUT THE PROJECT

If you have any questions or require further information please contact one of the researchers listed below.

Wai Fan CHINGwaifan.ching@hdr.qut.edu.au+617 3138 6651Brett MARTINbrett.martin@qut.edu.au+617 3138 7739Dominique Greerdominique.greer@qut.edu.au+617 3138 2987

CONCERNS / COMPLAINTS REGARDING THE CONDUCT OF THE PROJECT

QUT is committed to research integrity and the ethical conduct of research projects.

However, if you do have any concerns or complaints about the ethical conduct of the project you may contact the QUT Research Ethics Advisory Team on +617 3138 5123 or email humanethics@qut.edu.au. The QUT Research Ethics Advisory Team is not connected with the research project and can facilitate a resolution to your concern in an impartial manner.

Thank you for helping with this research project. Please print this sheet for your information.

STUDY 3B: QUESTIONNAIRE

Please answer the following questions based on what you think. There are no right or wrong answers. You are required to answer all questions.

Section I: Service encounter experience scenario

INSTRUCTION: This section contains a service encounter scenario in a written paragraph. Please read the following scenario, understand the scenario thoroughly and then provide your evaluations of the episode. As you are reading, please put yourself into the situation and imagine that you are experiencing the service.

** written scenario 8**

You are at home when you discover a problem with the water supply. You call a plumber to fix a blocked pipe. The plumber arrives and after several attempts appears to solve the problem. Yet right after this is problem solved, water in the kitchen sink overflows, wets the kitchen floor, and a large area of adjoining dining room floor. Seeing this, the plumber quickly pulls the plug from the kitchen sink and turns off the water tap. He then cleans the kitchen floor, even though you were the one who blocked the sink with the sink plug. He cleaned everything for you and apologises to you with a smile and a fleeting touch on your arm.

Based on the written scenario, please indicate the extent to which you agree with the following statements: (added items are highlighted in yellow)

	Stron	Strongly							
	Disagree						agree		
Manipulation check	•								
I think the employee in the scenario is responsible for the problem.	1	2	3	4	5	6	7		
I think that a similar problem would occur to someone in real life.	1	2	3	4	5	6	7		
I think the situations given in the scenario are realistic.	1	2	3	4	5	6	7		
I think the employee in the scenario is similar	1	2	3	4	5	6	7		

to employee from another company I have							
seen before.							
I think the severity of the service problem		2	2	4	_	-	7
above is extremely major.	1	2	3	4	5	6	7
In this scenario, the employee touched me.	1	2	3	4	5	6	7
Recovery satisfaction (Maxham, 2001)					l .		
The employee I dealt with communicated							
clearly and provided feedback about my	1	2	3	4	5	6	7
complaint.							
When I complained about poor service, the							
employee asked questions to help clarify the	1	2	3	4	5	6	7
situation.							
The employee I dealt with was very	1	2	3	4	5	6	7
understanding.	1	2	3	4	3	6	,
The employee I dealt with was reliable.	1	2	3	4	5	6	7
The employee I dealt with was honest in their	1	2	2	4	5	6	7
endeavours to solve my problem.		2	3	4	5	0	7
The employee I complained to first was able to		2	2	4	5	-	7
solve my problem.		2	3	4	3	6	7
The employee I complained to had to find							
someone else to solve my problem. (reverse		2	3	4	5	6	7
coded)							
My complaint was passed on from one		2	3	4	5	6	7
employee to the next. (reverse coded)	1	2	3	4	3	U	,
The company apologised for the service failure	1	2	3	4	5	6	7
that happened.							,
The company assured me that I am not 'out of	1	2	3	4	5	6	7
pocket'.	1	2	3	4	3	U	,
The employee I dealt with was polite.	1	2	3	4	5	6	7
The company provided me with an explanation	1	2	3	4	5	6	7
of why the problem had occurred.	1	2		-		O	,
The employee I dealt with provided a							
satisfactory explanation of why the problem		2	3	4	5	6	7
had occurred.							
The employee I dealt with worked in a tidy,		2	3	4	5	6	7
professional environment.		2	3	_	3	U	,
Revisit intention (Zeithaml et al., 1996)		I	I	I	I		
I would like to come back to this service provider in the future.	1	2	3	4	5	6	7
I would engage this service provider in the	1	2	3	4	5	6	7
future.						Ŭ	,

I will probably use this service provider in the future.	1	2	3	4	5	6	7
I plan to come back to this service provider in the future.		2	3	4	5	6	7
Word-of-mouth (Maxham, 2001)							
How likely are you to spread positive word-of-mouth about this plumbing service?	1	2	3	4	5	6	7
I would recommend this plumbing service to my friends.	1	2	3	4	5	6	7
Given my experience with this plumber, I would not recommend their service to my friends.	1	2	3	4	5	6	7
If my friends were looking for similar service, I would tell them to try another plumber.	1	2	3	4	5	6	7

Strongly					Strongly		
	disagree						agree
Perceived interactional justice (Maxham, 200	1; McC	oll-Ke	nnedy	& Spai	rks, 20	03)	
In this scenario, the employee:							
was friendly.	1	2	3	4	5	6	7
provided equal service to all customers.	1	2	3	4	5	6	7
demonstrated no bias towards me.	1	2	3	4	5	6	7
was attentive in providing good service.	1	2	3	4	5	6	7
was sensitive to handling the situation.	1	2	3	4	5	6	7
demonstrated understanding to handle the situation.		2	3	4	5	6	7
In dealing with the problem, the employee treated me in a courteous manner.	1	2	3	4	5	6	7
During the effort to solve the problem, the employee seemed to care about me.	1	2	3	4	5	6	7
While attempting to solve the problem, the employee considered my view.	1	2	3	4	5	6	7
I think that I was well_informed about the situation.	1	2	3	4	5	6	7
Mood states (Schoefer & Ennew, 2005)					I		
In this scenario, I would have a positive mood.	1	2	3	4	5	6	7
In this scenario, I would have a neutral mood.	1	2	3	4	5	6	7
In this scenario, I would have a negative mood.	1	2	3	4	5	6	7
Customer Involvement (Zaichkowsky (1994)							
To me, this airline inflight service is:	1	2	3	4	5	6	7
Important	1	2	3	4	5	6	7
Interesting		2	3	4	5	6	7
Relevant	1	2	3	4	5	6	7
Exciting	1	2	3	4	5	6	7
Means a lot to me	1	2	3	4	5	6	7

Appealing	1	2	3	4	5	6	7
Fascinating	1	2	3	4	5	6	7
Valuable	1	2	3	4	5	6	7
Involving	1	2	3	4	5	6	7
Needed	1	2	3	4	5	6	7

Section III: Personal Preference

INSTRUCTION: These questions are designed to learn a little more about you.

There are no right or wrong answers and data will be analysed at a group level (e.g. males vs. females).

Strongly					Str	ongly	
	Disag	gree					Agree
Individual differences in interpersonal touch	(Webb	& Pec	k, 2015)			
I often put my arm around people.	1	2	3	4	5	6	7
I consider myself to be a more 'touchy' person than most of my friends.	1	2	3	4	5	6	7
I feel more comfortable initiating touch than most people.	1	2	3	4	5	6	7
I feel more comfortable with touch than most people.	1	2	3	4	5	6	7
When I greet someone, it often involves touch.	1	2	3	4	5	6	7
When talking to people, I often touch them on the arm.	1	2	3	4	5	6	7
I can't help touching people when I am talking to them.	1	2	3	4	5	6	7
I am comfortable hugging other people.	1	2	3	4	5	6	7
When shaking someone's hand, I typically put my left hand on their upper arm.	1	2	3	4	5	6	7
I don't mind if someone touches my arm.	1	2	3	4	5	6	7
When talking to someone, I don't mind if they touch me on the arm.	1	2	3	4	5	6	7
I am comfortable with people touching me.	1	2	3	4	5	6	7
During conversation, I don't mind if people touch me.	1	2	3	4	5	6	7
I am comfortable if a co-worker touches me on the arm when explaining something.	1	2	3	4	5	6	7
I find myself pulling away if someone touches	1	2	3	4	5	6	7

me.							
I typically don't mind receiving touch from another person.	1	2	3	4	5	6	7
I feel comfortable having a stranger touch me on the arm during conversation.	1	2	3	4	5	6	7
I am comfortable having someone touch me on the shoulder to get my attention.	1	2	3	4	5	6	7
I don't mind if someone places their hand on my upper back to guide me into a room.	1	2	3	4	5	6	7

Section III: Demographic Information 1. Your gender: ☐ Male ☐ Female ☐ Prefer not to answer 2. Your age: _____ years ☐ Prefer not to answer **age will then be recoded into age groups** 3. Your religion: _____ ☐ Prefer not to answer **religion will then be recoded into major religion groups** 4. Your ethnic group: _____ ☐ Prefer not to answer **Ethnic group will then be recoded into major ethnic groups** ***reason for not providing drop down menu is to avoid minority being neglected in questionnaire*** 5. Have you experienced negative service encounters in the past three months? \square Yes □ No

Appendix E: Study 2 Scenario Development

Scenario development

Factorial design terms and notation

	2 X Interpersonal Touch	
2 x Perceived Employee	No touch/Not Responsible (1)	Touch/Not Responsible (2)
Responsibility	No Touch/Responsible (3)	Touch/Responsible (4)

	Scenario background – Restaurants
Background descriptions	Scenario in a casual dining restaurant
	You are visiting a restaurant with your family. The waiter takes your order and after waiting for about 15 minutes, the drinks are served and shortly after the salads and the main courses. You remembered you have ordered a side order that was not served. When you check with the waiter, the waiter answers "No worries. Let me check!" When the waiter checks on the order screen, he finds that the side order was not ordered. He comes back to you and asks which side dish you ordered.
Scenario	Scenario 1 (no touch/ not responsible) Your family member tells you that you have not ordered any side dish (PER: not responsible). The waiter says to you with smile, "We can now take your order. It won't be long!" (Interpersonal Touch: no touch)
	Scenario 2 (touch/not responsible) Your family member tells you that you have not ordered any side dish (PER: not responsible). The waiter says to you with smile, "We can now take your order." The waiter gives you a light pat on the shoulder. "It won't be long!" (Interpersonal Touch: touch).
	Scenario 3 (no touch / responsible) You remind the waiter that you ordered the side dish together with the rest of the food, -which was all served except this order. The waiter apologises to you (PER: responsible) and smiles, "Let's take your order now. It won't be long!" (Interpersonal Touch: no touch)
	Scenario 4 (touch / responsible)

You remind the waiter that you ordered the side dish together with the rest of the food, which was all served except this order. The waiter apologises to you and smiles, "let's take your order now." The waiter gives you a light pat on the shoulder. "It won't be long!" (Interpersonal Touch: touch).

Table: Full Experimental Scenarios for Study 2						
	Interpersonal Touch: No touch	Interpersonal Touch: Touch				
Perceived Employee Responsibility: Not responsible	Scenario 1: You are visiting a restaurant with your family. The waiter takes your order and after waiting for about 15 minutes, the drinks are served, followed shortly after by the salads and the main courses. You remember that you ordered a side order, which has not been served. When you check with the waiter, the waiter answers "No worries. Let me check!" When the waiter checks on the order screen, he finds that the side order was not ordered. He comes back to you and asks which side dish you ordered. Your family member tells you that you did not order a side dish. The waiter says to you with a smile, "We can take your order now. It won't be long!"	Scenario 2: You are visiting a restaurant with your family. The waiter takes your order and after waiting for about 15 minutes, the drinks are served, followed shortly after by the salads and the main courses. You remember that you ordered a side order, which has not been served. When you check with the waiter, the waiter answers "No worries. Let me check!" When the waiter checks on the order screen, he finds that the side order was not ordered. He comes back to you and asks which side dish you ordered. Your family member tells you that you did not order a side dish. The waiter says to you with a smile, "We can take your order now." The waiter gives you a light pat on the shoulder. "It won't be long!"				
Perceived Employee Responsibility: Responsible	Scenario 3: You are visiting a restaurant with your family. The waiter takes your order and after waiting for about 15 minutes, the drinks are served, followed shortly after by the salads and the main courses. You remember that you ordered a side order, which has not been served. When you check with the waiter, the waiter answers "No worries. Let me check!" When the	Scenario 4: You are visiting a restaurant with your family. The waiter takes your order and after waiting for about 15 minutes, the drinks are served, followed shortly after by the salads and the main courses. You remember that you ordered a side order, which has not been served. When you check with the waiter, the waiter answers "No worries. Let me check!" When				

waiter checks on the order screen, he finds that the side order was not ordered. He comes back to you and asks which side dish you ordered.

You remind the waiter that you ordered the side dish together with the rest of the food, which was all served except this order. The waiter apologises to you and smiles, "Let's take your order now. It won't be long!"

the waiter checks on the order screen, he finds that the side order was not ordered. He comes back to you and asks which side dish you ordered.

You remind the waiter that you ordered the side dish together with the rest of the food, which was all served except this order. The waiter apologises to you and smiles, "Let's take your order now."

The waiter gives you a light pat on the shoulder.

"It won't be long!"

Appendix F: Study 3A Scenario Development

Full Experimental Scenarios for Sty 3A

Group	Full Scenario Descriptions
Scenario 1	Imagine you are travelling on a flight when a hot meal is served. When the flight attendant distributes the meal which you had ordered online, you find that the food is not what you ordered. You point out to the flight attendant that you ordered the grilled chicken with rice, but instead you have been given the steamed chicken with rice. (failure severity: low) The flight attendant checks your order and reconfirms that you received the wrong meal because the online ordering system malfunctioned (PER: not responsible). They change the meal for
Scenario 2	you and apologise with a smile (interpersonal touch: no touch). Imagine you are travelling on a flight when a hot meal is served. When the flight attendant distributes the meal which you had ordered online, you find that the food is not what you ordered. You point out to the flight attendant that you ordered the grilled chicken with rice, but instead you have been given the steamed chicken with rice. (failure severity: low)
	The flight attendant checks your order and reconfirms that you received the wrong meal because the online ordering system malfunctioned (PER: not responsible). They change the meal for you and apologise with a smile and a fleeting touch on your arm (Interpersonal Touch: touch).
Scenario 3	Imagine you are travelling on a flight when a hot meal is served. When the flight attendant distributes the meal which you had ordered online, you find that the food is not what you ordered. You point out to the flight attendant that you ordered the grilled chicken with rice, but instead you have been given the steamed chicken with rice. (failure severity: low) The flight attendant checks your order and reconfirms that you received the wrong meal, as the meal is meant for another
	passenger (PER: responsible). They change the meal for you and apologise with a smile (interpersonal touch: no touch).
Scenario 4	Imagine you are travelling on a flight when a hot meal is served. When the flight attendant distributes the meal which you had ordered online, you find that the food is not what you ordered. You point out to the flight attendant that you ordered the grilled

	chicken with rice, but instead you have been given the steamed chicken with rice. (failure severity: low)
	The flight attendant checks your order and reconfirms that you received the wrong meal, as the meal is meant for another passenger (PER: responsible). They change the meal for you and apologise with a smile and a fleeting touch on your arm (Interpersonal Touch: touch).
Scenario 5	Imagine you are travelling on a flight when a hot meal is served. When the flight attendant distributes the meal which you had ordered online, you find that the food is not what you ordered. You point out to the flight attendant that you ordered the nut-free meal due to a life-threatening allergy you have, but you have been given the pasta pesto which is full of nuts. You would have severe health complications if you ate this meal due to your allergy to nuts. (failure severity: high) The flight attendant checks your order and reconfirms that you received the wrong meal because the online ordering system
	malfunctioned (PER: not responsible). They change the meal for you and apologise with a smile (interpersonal touch: no touch).
Scenario 6	Imagine you are travelling on a flight when a hot meal is served. When the flight attendant distributes the meal which you had ordered online, you find that the food is not what you ordered. You point out to the flight attendant that you ordered the nut-free meal due to a life-threatening allergy you have, but you have been given the pasta pesto which is full of nuts. You would have severe health complications if you ate this meal due to your allergy to nuts. (failure severity: high)
	The flight attendant checks your order and reconfirms that you received the wrong meal because the online ordering system malfunctioned (PER: not responsible). They change the meal for you and apologise with a smile and a fleeting touch on your arm (Interpersonal Touch: touch).
Scenario 7	Imagine you are travelling on a flight when a hot meal is served. When the flight attendant distributes the meal which you had ordered online, you find that the food is not what you ordered. You point out to the flight attendant that you ordered the nut-free meal due to a life-threatening allergy you have, but you have been given the pasta pesto which is full of nuts. You would have severe health complications if you ate this meal due to your

	allergy to nuts. (failure severity: high)
	The flight attendant checks your order and reconfirms that you received the wrong meal, as the meal is meant for another passenger (PER: responsible). They change the meal for you and apologise with a smile (interpersonal touch: no touch).
Scenario 8	Imagine you are travelling on a flight when a hot meal is served. When the flight attendant distributes the meal which you had ordered online, you find that the food is not what you ordered. You point out to the flight attendant that you ordered the nut-free meal due to a life-threatening allergy you have, but you have been given the pasta pesto which is full of nuts. You would have severe health complications if you ate this meal due to your allergy to nuts. (failure severity: high) The flight attendant checks your order and reconfirms that you received the wrong meal, as the meal is meant for another passenger (PER: responsible). They change the meal for you and apologise with a smile and a fleeting touch on your arm (Interpersonal Touch: touch).

Appendix G: Study 3B Scenario Development

Full Experimental Scenarios for Study 3B

Group	Full Scenario Descriptions
Scenario 1	You are at home when you discover a problem with the water
	supply. You call a plumber to fix a blocked pipe. The plumber
	arrives and after several attempts appears to solve the problem.
	Yet right after this is problem solved, water in the kitchen sink
	overflows and wets the kitchen floor (failure severity: low).
	Seeing this, the plumber quickly pulls the plug from the kitchen
	sink and turns off the water tap. He then cleans the kitchen floor,
	even though you were the one who blocked the sink with the sink
	plug (PER: not responsible). He cleans everything for you with a smile (interpersonal touch: no touch).
Scenario 2	You are at home when you discover a problem with the water
	supply. You call a plumber to fix a blocked pipe. The plumber
	arrives and after several attempts appears to solve the problem.
	Yet right after this is problem solved, water in the kitchen sink
	overflows and wets the kitchen floor (failure severity: low).
	Seeing this, the plumber quickly pulls the plug from the kitchen
	sink and turns off the water tap. He then cleans the kitchen floor,
	even though you were the one who blocked the sink with the sink
	plug (PER: not responsible). He cleans everything for you and
	apologises to you with a smile and a fleeting touch on your arm
	(Interpersonal Touch: touch).
Scenario 3	You are at home when you discover a problem with the water
	supply. You call a plumber to fix a blocked pipe. The plumber
	arrives and after several attempts appears to solve the problem.
	Yet right after this is problem solved, water in the kitchen sink
	overflows and wets the kitchen floor (failure severity: low).
	Seeing this, the plumber quickly pulls the plug from the kitchen
	sink and turns off the water tap. He then cleans the kitchen floor,
	as he accidentally pushed it down while repairing the water
	supply problem, which meant the water was not drained (PER:
	responsible). He cleans everything for you with a smile
	(interpersonal touch: no touch).
Scenario 4	You are at home when you discover a problem with the water
	supply. You call a plumber to fix a blocked pipe. The plumber

	arrives and after several attempts appears to solve the problem. Yet right after this is problem solved, water in the kitchen sink overflows and wets the kitchen floor (failure severity: low).
	Seeing this, the plumber quickly pulls the plug from the kitchen sink and turns off the water tap. He then cleans the kitchen floor, even though you were the one who blocked the sink with the sink plug (PER: not responsible). He cleans everything for you and apologises to you with a smile and a fleeting touch on your arm (Interpersonal Touch: touch).
Scenario 5	You are at home when you discover a problem with the water supply. You call a plumber to fix a blocked pipe. The plumber arrives and after several attempts appears to solve the problem. Yet right after this is problem solved, water in the kitchen sink overflows, wets the kitchen floor and a large area of adjoining dining room floor (failure severity: high).
	Seeing this, the plumber quickly pulls the plug from the kitchen sink and turns off the water tap. He then cleans the kitchen floor, even though you were the one who blocked the sink with the sink plug (PER: not responsible). He cleans everything for you and apologises to you with a smile and a fleeting touch on your arm (Interpersonal Touch: touch).
Scenario 6	You are at home when you discover a problem with the water supply. You call a plumber to fix a blocked pipe. The plumber arrives and after several attempts appears to solve the problem. Yet right after this is problem solved, water in the kitchen sink overflows, wets the kitchen floor and a large area of adjoining dining room floor (failure severity: high).
	Seeing this, the plumber quickly pulls the plug from the kitchen sink and turns off the water tap. He then cleans the kitchen floor, even though you were the one who blocked the sink with the sink plug (PER: not responsible). He cleans everything for you and apologises to you with a smile and a fleeting touch on your arm (Interpersonal Touch: touch).
Scenario 7	You are at home when you discover a problem with the water supply. You call a plumber to fix a blocked pipe. The plumber arrives and after several attempts appears to solve the problem. Yet right after this is problem solved, water in the kitchen sink overflows, wets the kitchen floor and a large area of adjoining dining room floor (failure severity: high).

	Seeing this, the plumber quickly pulls the plug from the kitchen sink and turns off the water tap. He then cleans the kitchen floor, as he accidentally pushed it down while repairing the water supply problem, which meant the water was not drained (PER: responsible). He cleans everything for you with a smile (interpersonal touch: no touch).
Scenario 8	You are at home when you discover a problem with the water supply. You call a plumber to fix a blocked pipe. The plumber arrives and after several attempts appears to solve the problem. Yet right after this is problem solved, water in the kitchen sink overflows, wets the kitchen floor and a large area of adjoining dining room floor (failure severity: high). Seeing this, the plumber quickly pulls the plug from the kitchen sink and turns off the water tap. He then cleans the kitchen floor, even though you were the one who blocked the sink with the sink plug (PER: not responsible). He cleans everything for you and apologises to you with a smile and a fleeting touch on your arm (Interpersonal Touch: touch).